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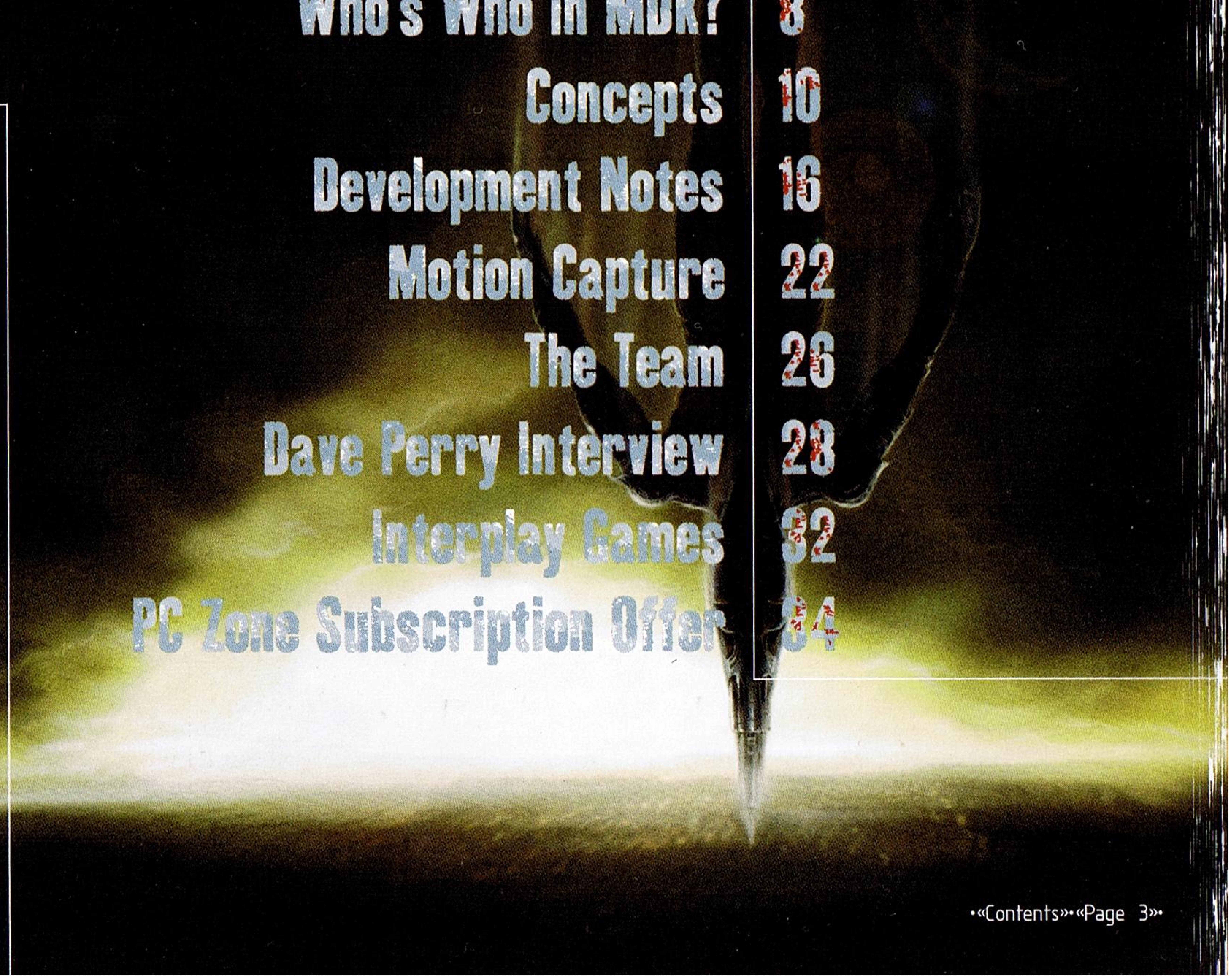

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Shiny Entertainment

Laguna
Design
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1088

Shiny Entertainment is located a mile north of main beach in Laguna Beach, sunny California.

Set up by Dave Perry in October 1993, the company was formed from a handful of talented developers who had collectively designed over 200 video and computer game titles.

Early on, Perry teamed up with Playmates Toys (famous for the Star Trek and Teenage Mutant Ninja Turtles toys), who were anxious to gain a foothold in the video game business. PlayMates offered to buy the rights for any character that the company reckoned would have potentially more widespread appeal.

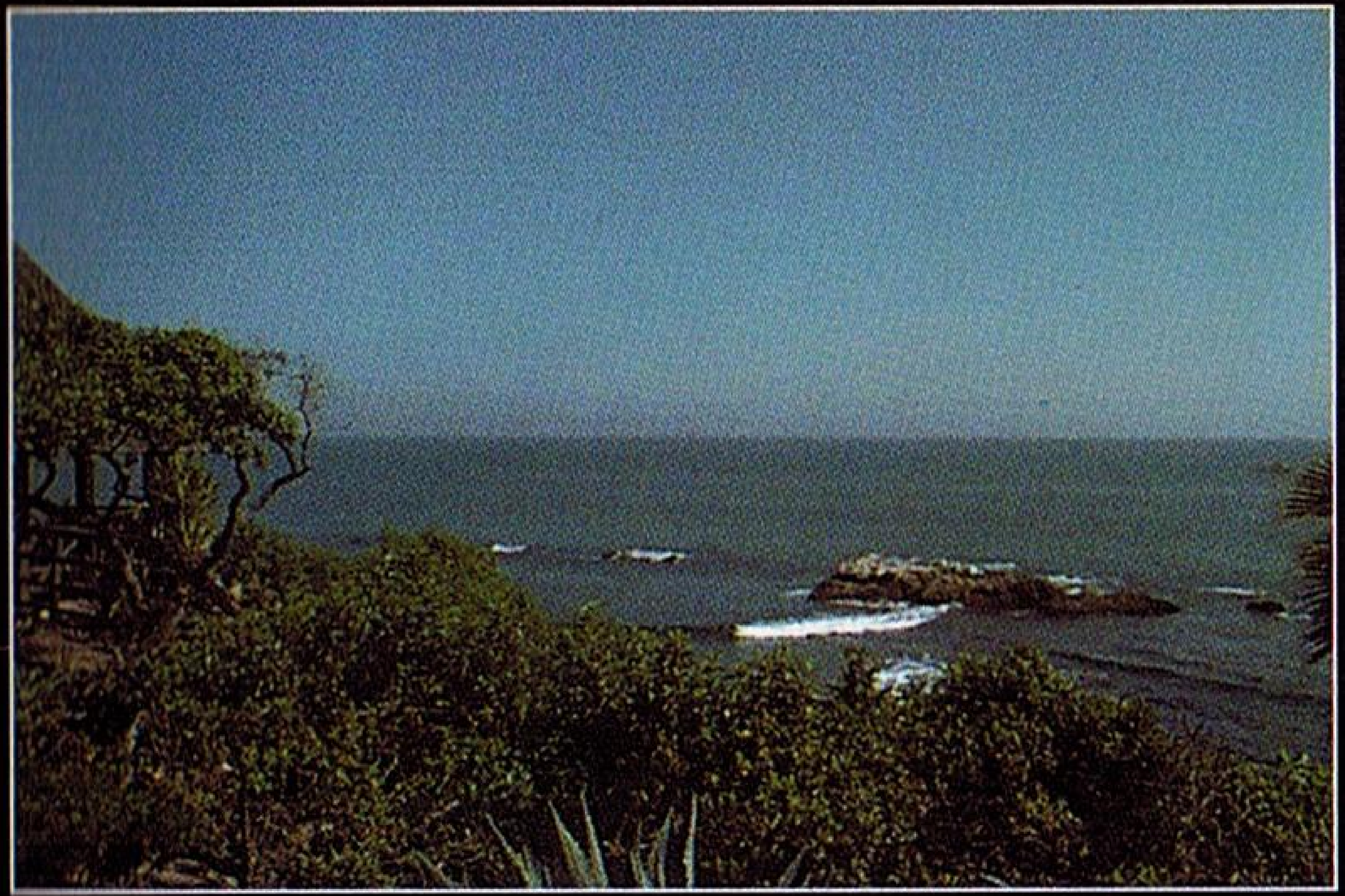
In a bold move, Perry declined the idea of creating games for existing characters (including Disney's Lion King) and instead opted to develop original characters for not just video games but also cartoons, toys and feature films. Playmates promptly set up Playmates Interactive Entertainment, Inc. based in La Mirada, California. It was now that Shiny moved from being a plain and simple games developer to being a 'developer of intellectual copyrights'. Heady stuff indeed.

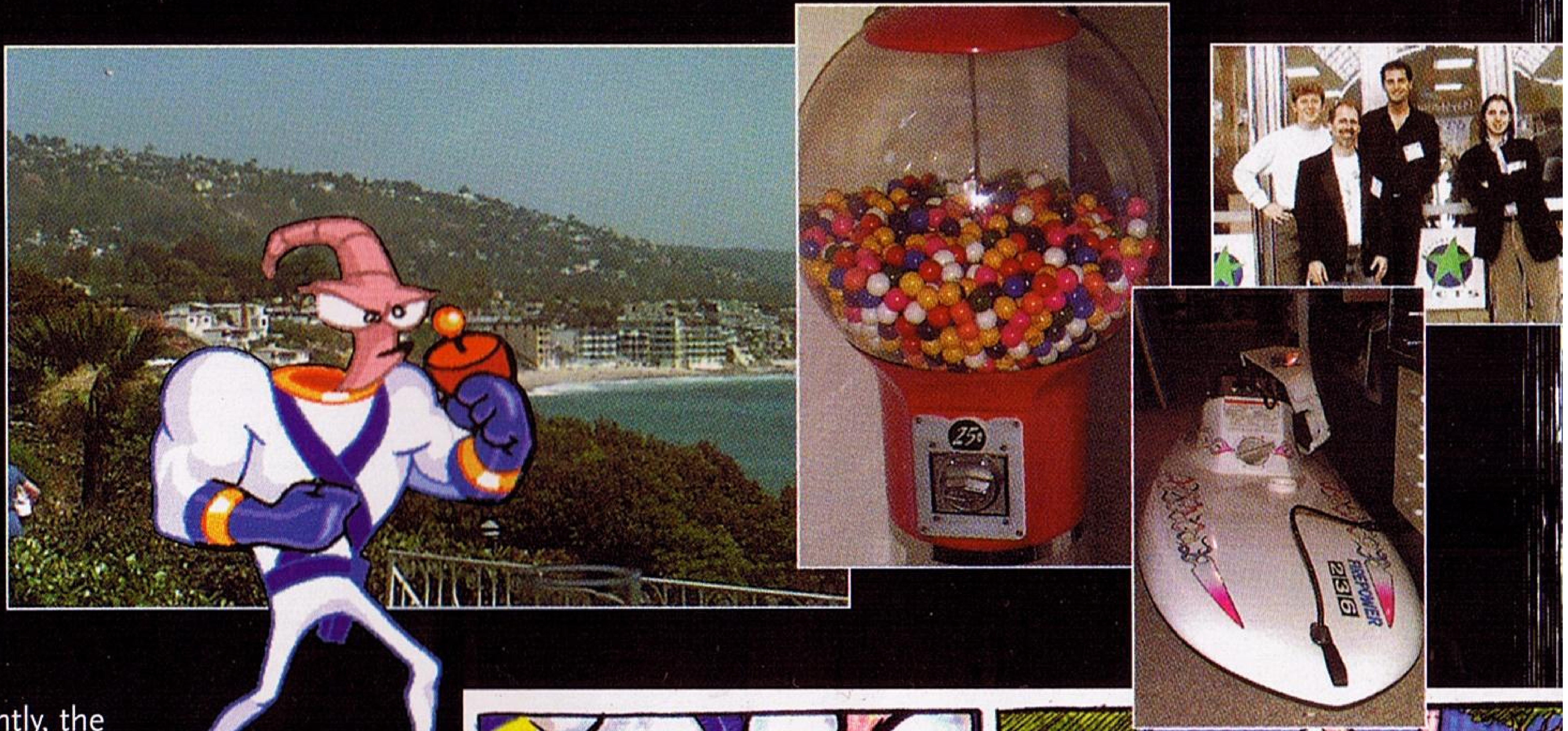
Shiny quickly began to grow: "We picked top people from virtually every country around the world to ensure that whatever we create, it will be well received in each territory. This company is truly cosmopolitan, and we will take the extra effort to localise our games so that our fans can still enjoy our jokes and our games without the need to speak English."

Shiny's first game, *Earthworm Jim*, featured a spineless worm living in an indestructible super-hero suit: "We thought the public was ready for fresher, quirkier, more oddball things and we poured all our efforts into this character."

Not only did Shiny launch *Earthworm Jim*, but it also trademarked a new technique which they named Animotion. This was a breakthrough software technology that allowed animators to sketch their work on paper and then transfer it onto computer using a proprietary digitising system. In short, this means that traditional animation can be drawn for a game and then used without any of the quality and feel being lost in the transition: "The result is screen after screen of art that looks more like a cartoon than choppy, blocky characters typical of older-generation games," explains Perry.

The Earthworm Jim character was an instant hit. Playmates Interactive published the video game, the public bought it, the critics praised it and the video game media revered it with 'Jim' gracing over 40 magazine covers worldwide. Awards have included Game



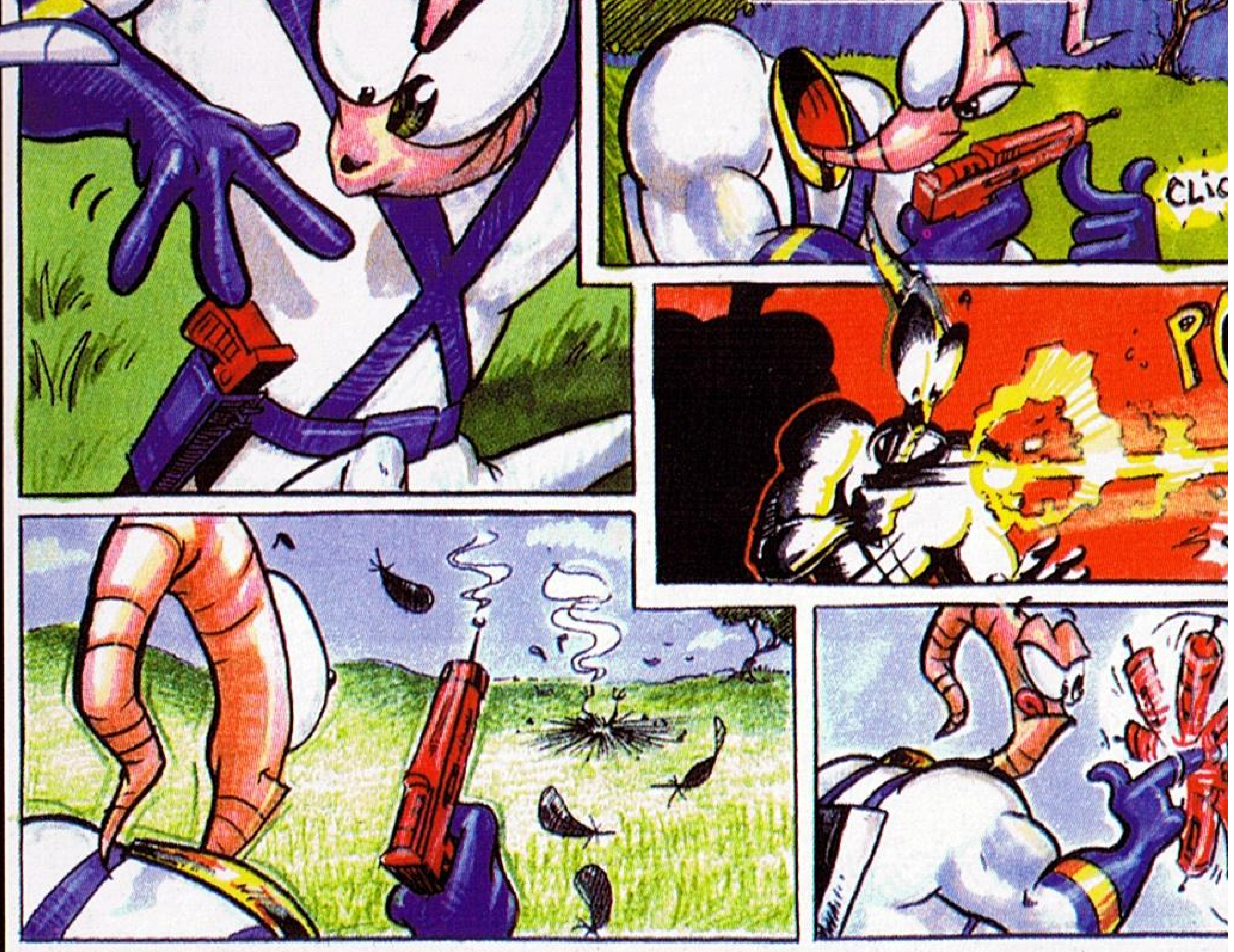


of the Year, Best Graphics, Best Action Product and Best Sound from Sega, Editor's Choice Gold from US magazine *EGM*, Best SNES Action Game from *Game Players* (another US games magazine), Best Console Programmer from the industry's Golden Joystick Awards, Best Developer from *Game Informer* and finally Best New Character and Game of the Year from *Game Fan* magazine.

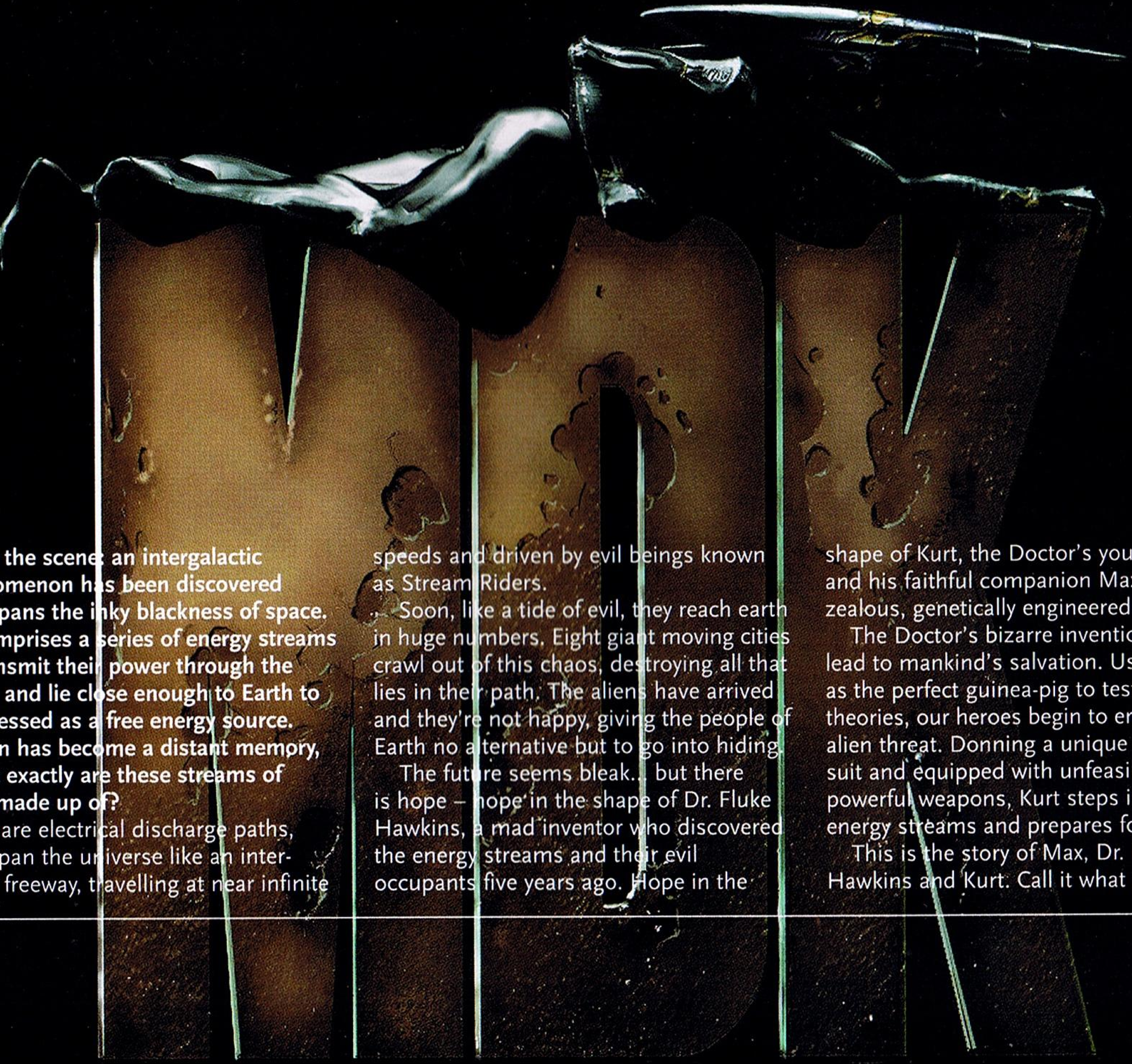
Playmates then presented Earthworm Jim to Universal Cartoon Studios which had recently forged a relationship with the new Warner Brothers television network. Less than two years from conception *Earthworm Jim* had made the transition from sketches to video game to cartoon series. The cartoon is now on the WB network in the US (The Children's Channel & Channel 4 in the UK) on Saturday mornings and is enjoying rave reviews. Recently, the show was given the green light for a second year and so an entirely new set of episodes is currently in production.

In 1995 Shiny was bought by Interplay Productions, a leading video games publisher based in Irvine, California. Interplay lives by its tag line "By Gamers, for Gamers" and, seeing Shiny as a developer with the same point of view, the match was made. Furthermore, MCA/Universal has a minority stake in Interplay, bringing a formidable team together.

Later in 1995, Shiny departed from the world of 2D 'pencil & paper' animation techniques and moved 100 per cent into the world of 3D animation as seen in movies like *Jurassic Park* and *Toy Story*. This required a drastic change of direction for Shiny, resulting in the company doubling in size by the start of 1996.



MDK



Picture the scene: an intergalactic phenomenon has been discovered which spans the inky blackness of space. This comprises a series of energy streams that transmit their power through the cosmos and lie close enough to Earth to be harnessed as a free energy source. Pollution has become a distant memory, so what exactly are these streams of energy made up of?

They are electrical discharge paths, which span the universe like an intergalactic freeway, travelling at near infinite speeds and driven by evil beings known as Stream Riders.

Soon, like a tide of evil, they reach earth in huge numbers. Eight giant moving cities crawl out of this chaos, destroying all that lies in their path. The aliens have arrived and they're not happy, giving the people of Earth no alternative but to go into hiding.

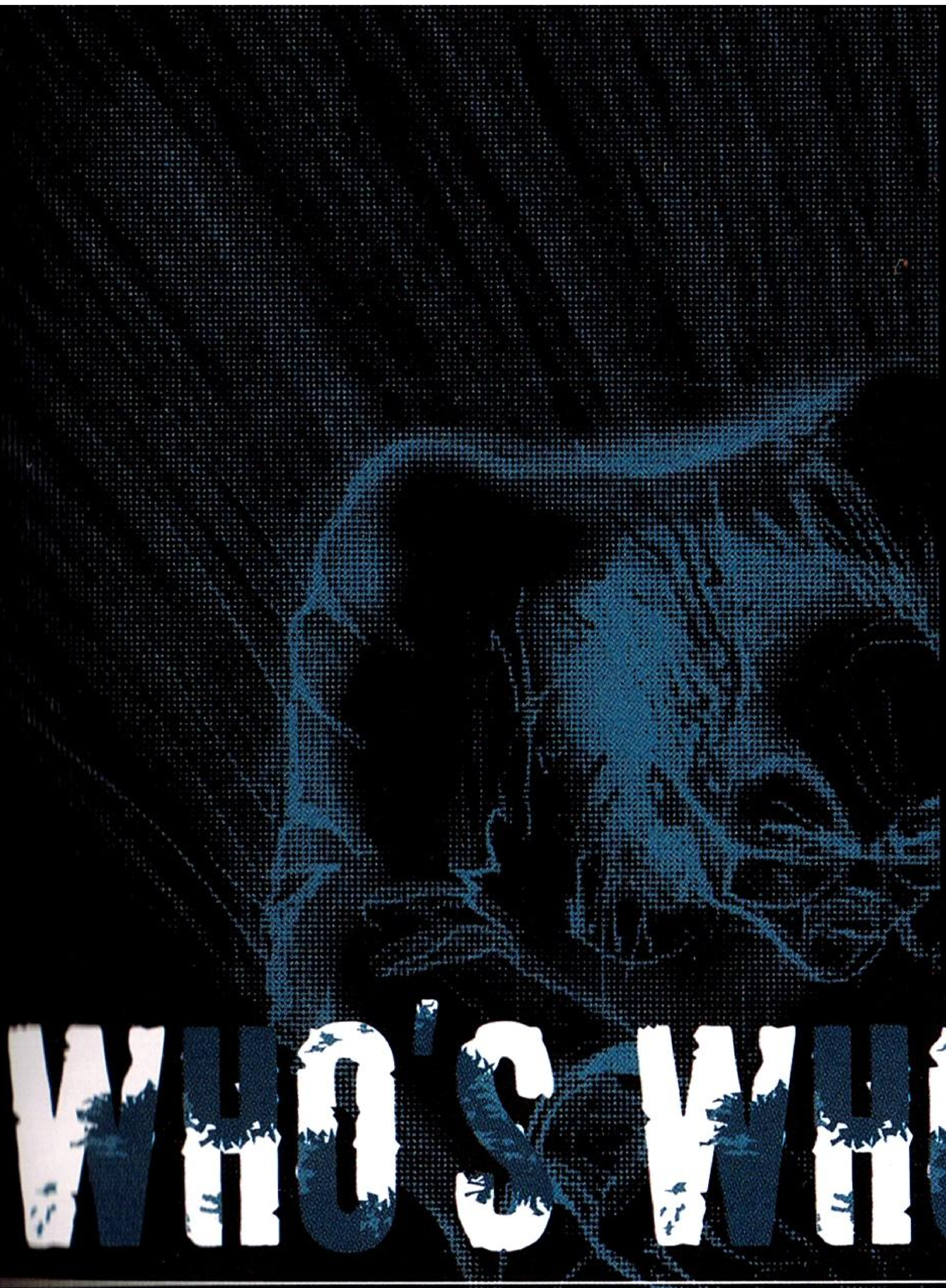
The future seems bleak... but there is hope – hope in the shape of Dr. Fluke Hawkins, a mad inventor who discovered the energy streams and their evil occupants five years ago. Hope in the shape of Kurt, the Doctor's young protégé and his faithful companion Max, an over-zealous, genetically engineered dog.

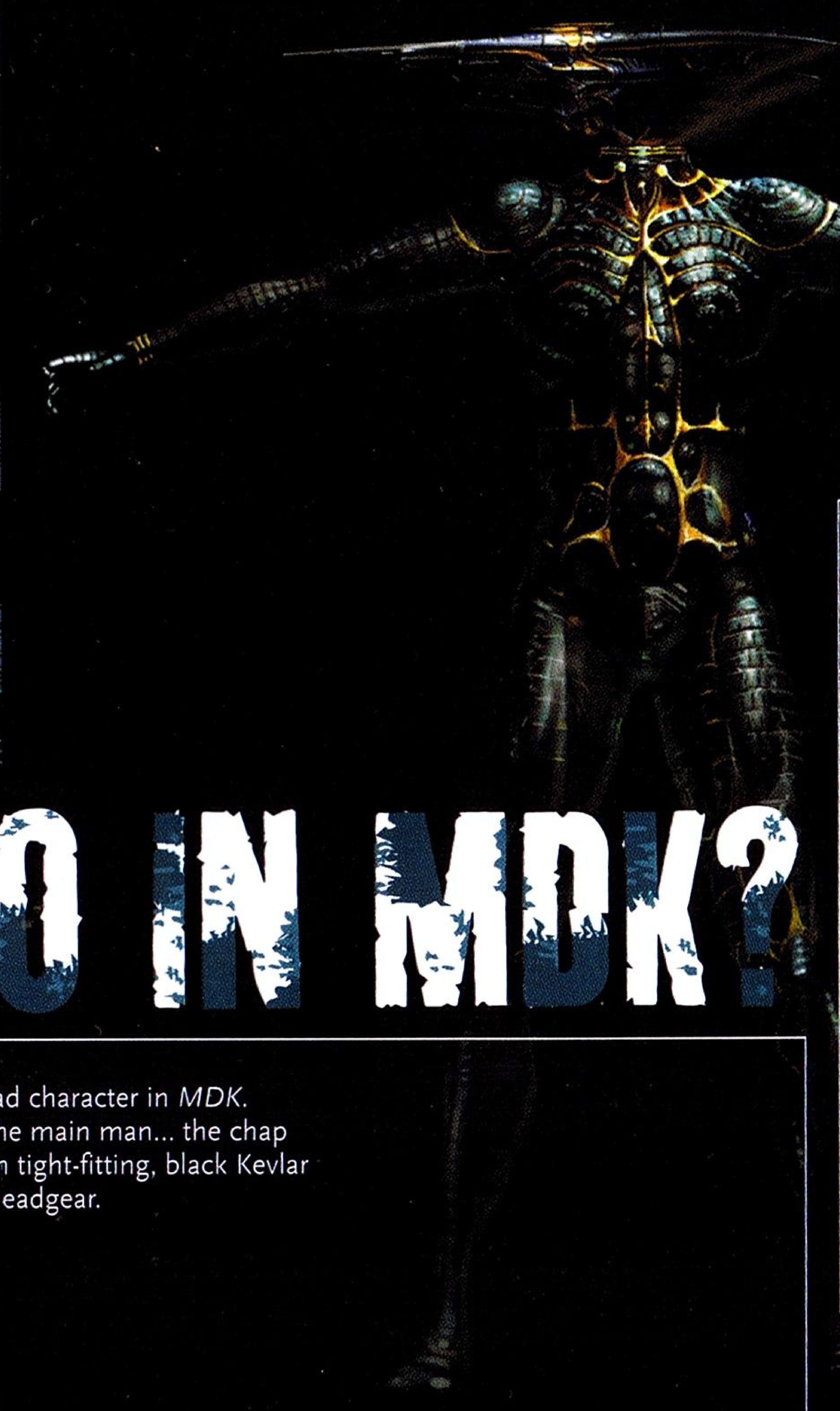
The Doctor's bizarre inventions could lead to mankind's salvation. Using Kurt as the perfect guinea-pig to test out his theories, our heroes begin to eradicate the alien threat. Donning a unique combat suit and equipped with unfeasibly powerful weapons, Kurt steps into the energy streams and prepares for battle.

This is the story of Max, Dr. Fluke Hawkins and Kurt. Call it what you will...

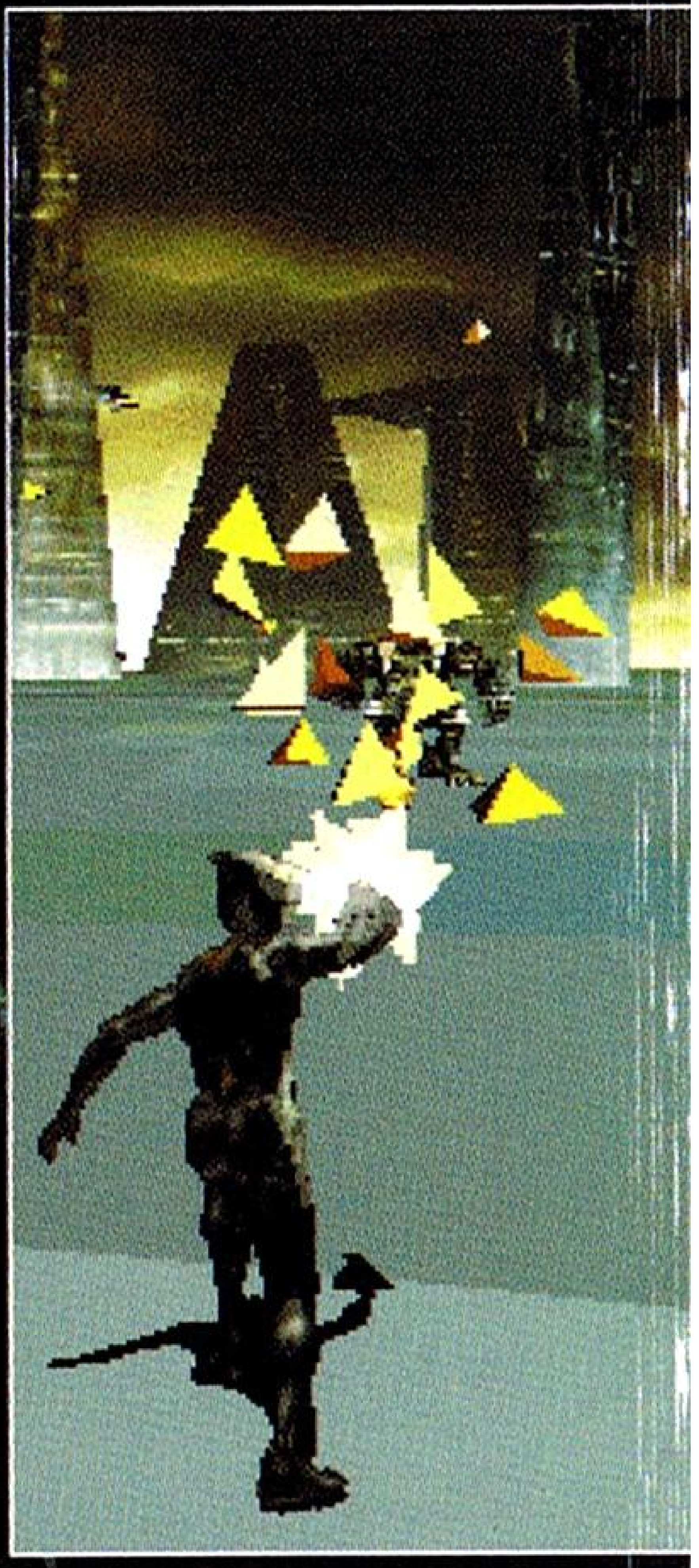
Max is our hero's trusty sidekick. Genetically engineered by Dr. Hawkins, Max isn't exactly what you'd call normal.

Dr. Fluke Hawkins is quite clearly utterly bonkers but, to his credit, he did spot the alien threat before anyone else on earth. Fortunately, the Doctor is also a mad inventor with a penchant for the bizarre who's responsible for kitting out our hero with the necessary weaponry.





WHO'S WHO IN MDK?

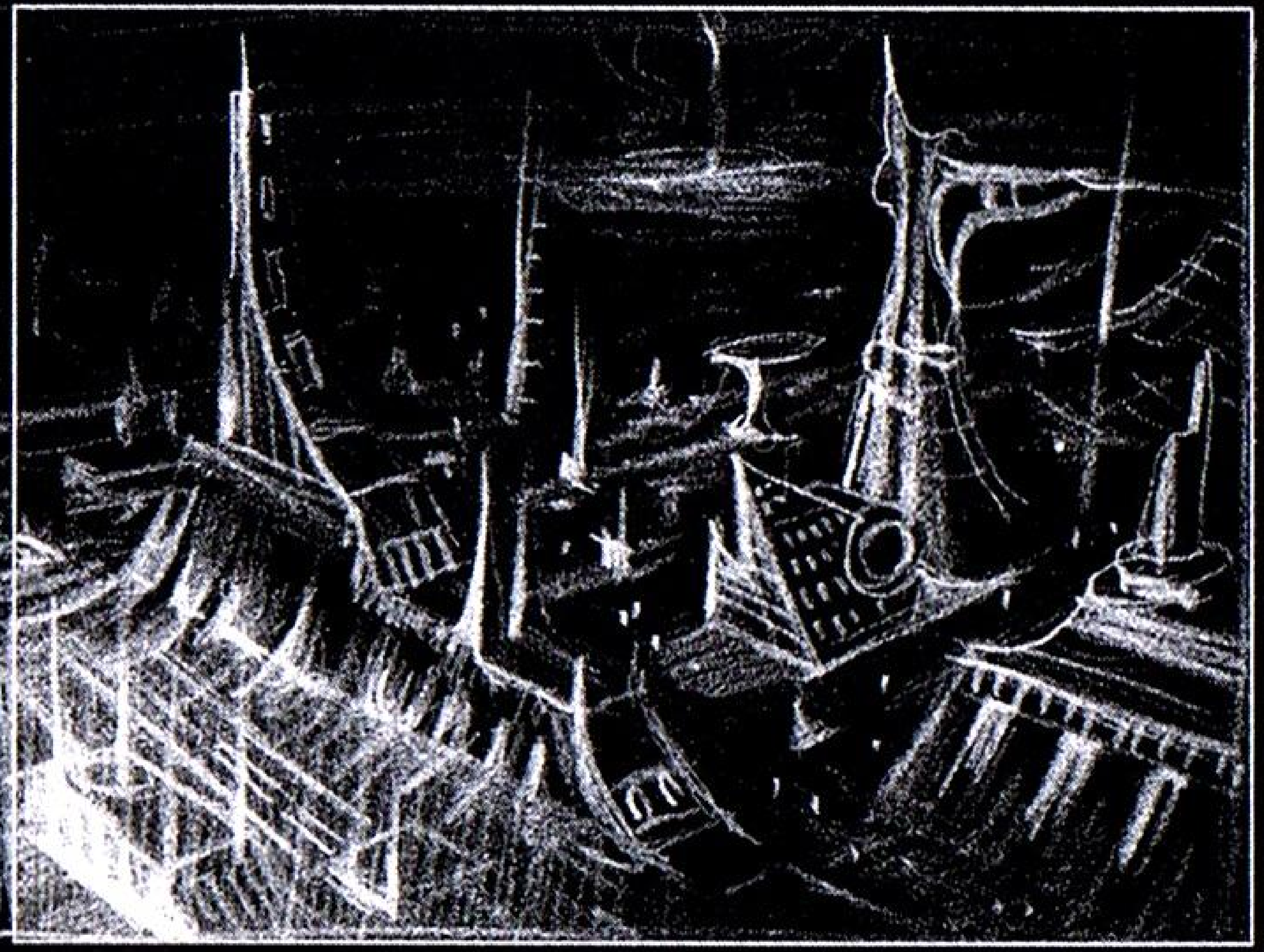


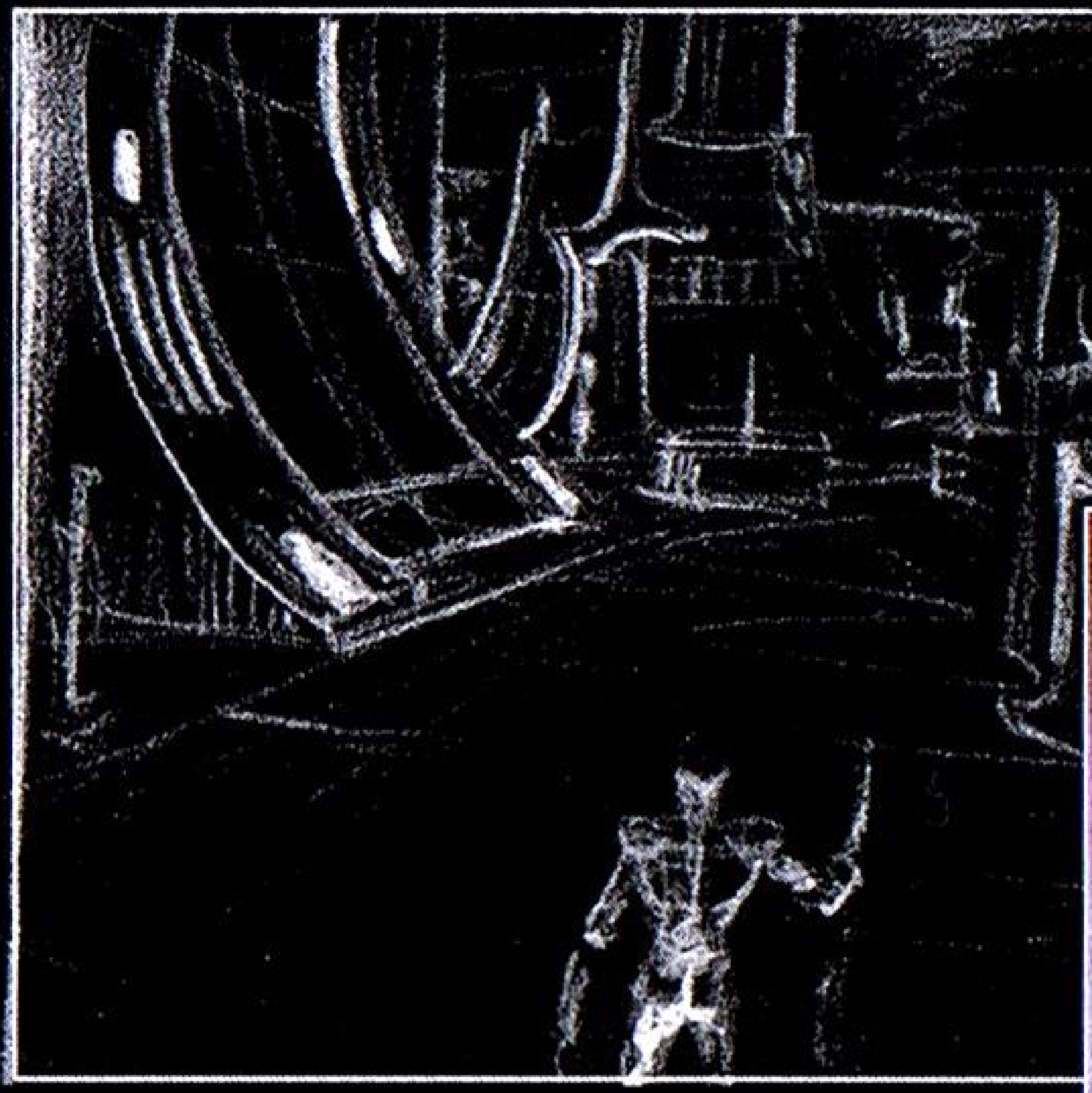
Kurt is the lead character in *MDK*. The hero. The main man... the chap who dresses in tight-fitting, black Kevlar and unusual headgear.

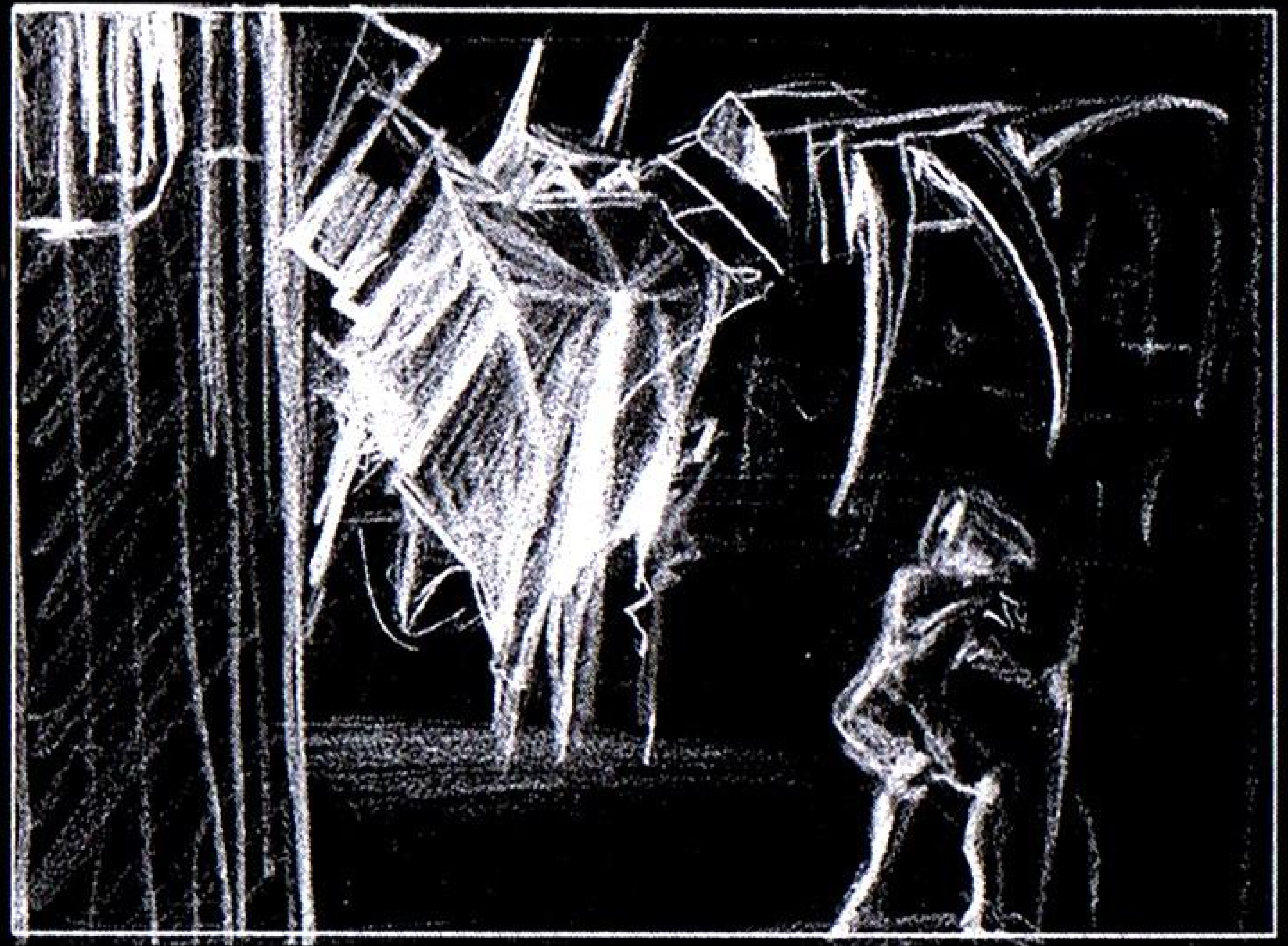
CONCEPTS

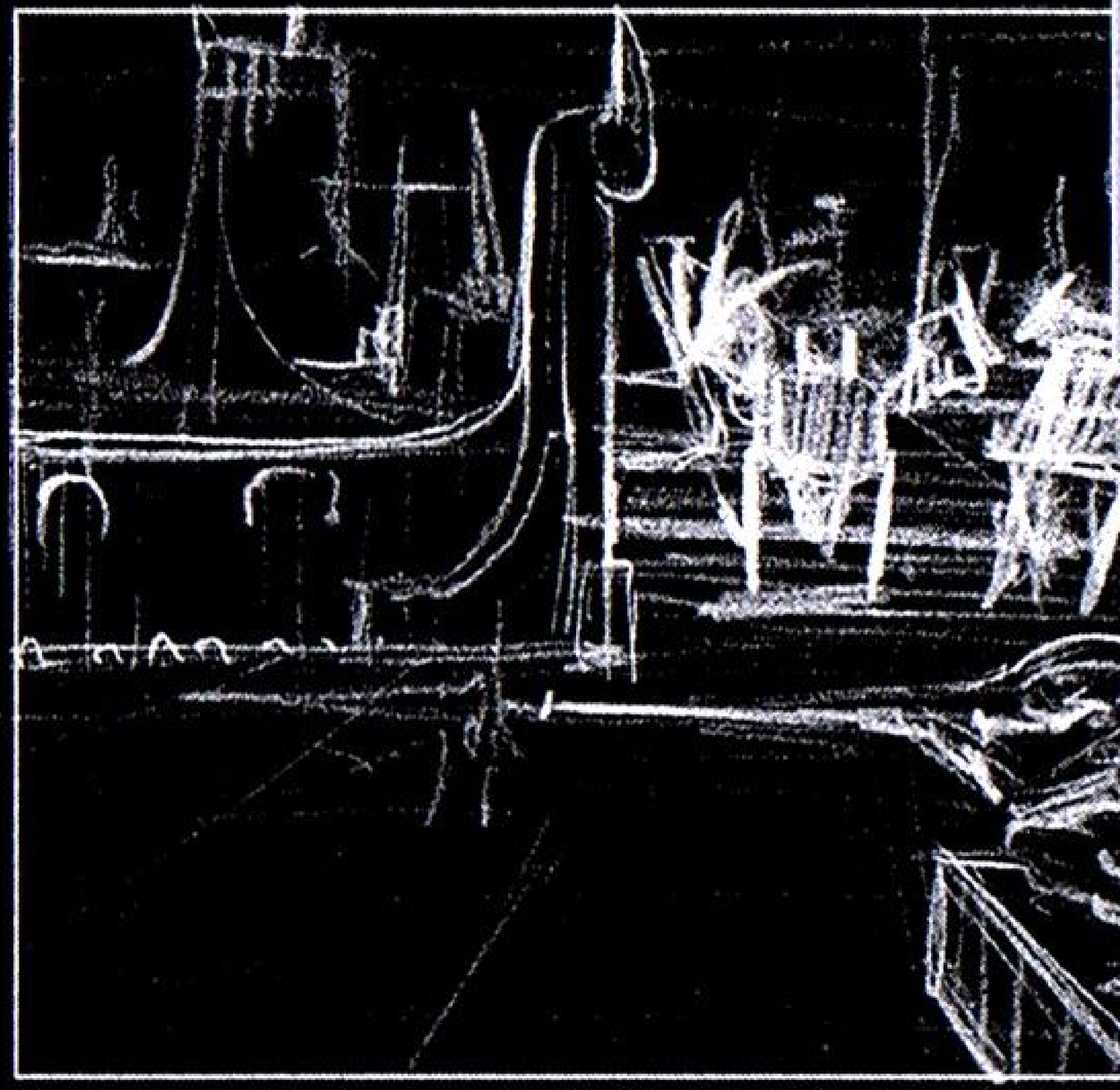
The early concept for the game began life as some sketches of a 3D combat game which moved away from the current norm of first-person perspective shooters, such as *Doom* or *Quake*. It was decided very early on that this would be a project that not only exploited the capabilities of the PC to the full, but also brought console game style gameplay into a more advanced environment.

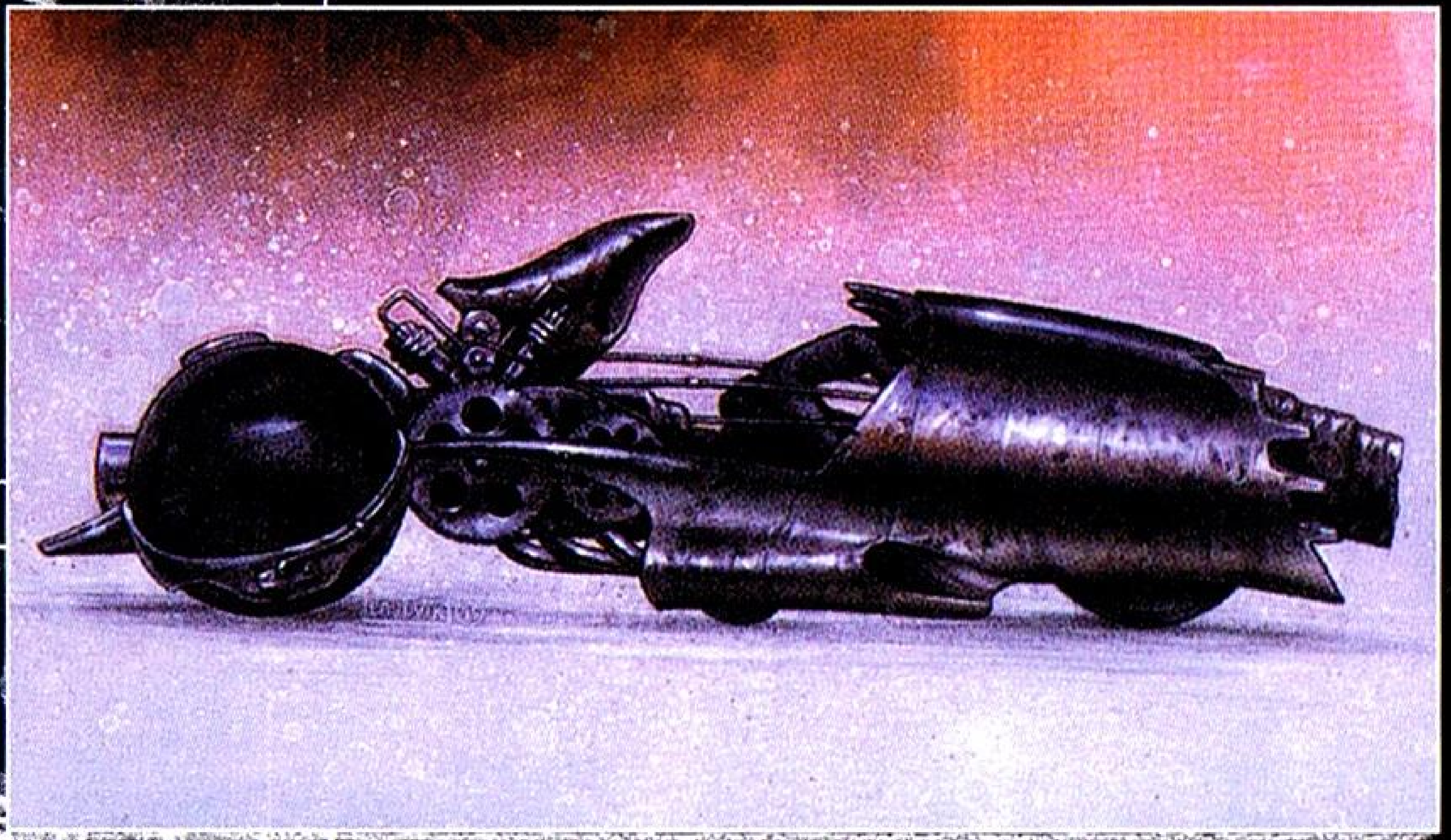
The early sketches not only included ideas for the 3D world, but also for a number of the enemy robots that would eventually make it into the final game.



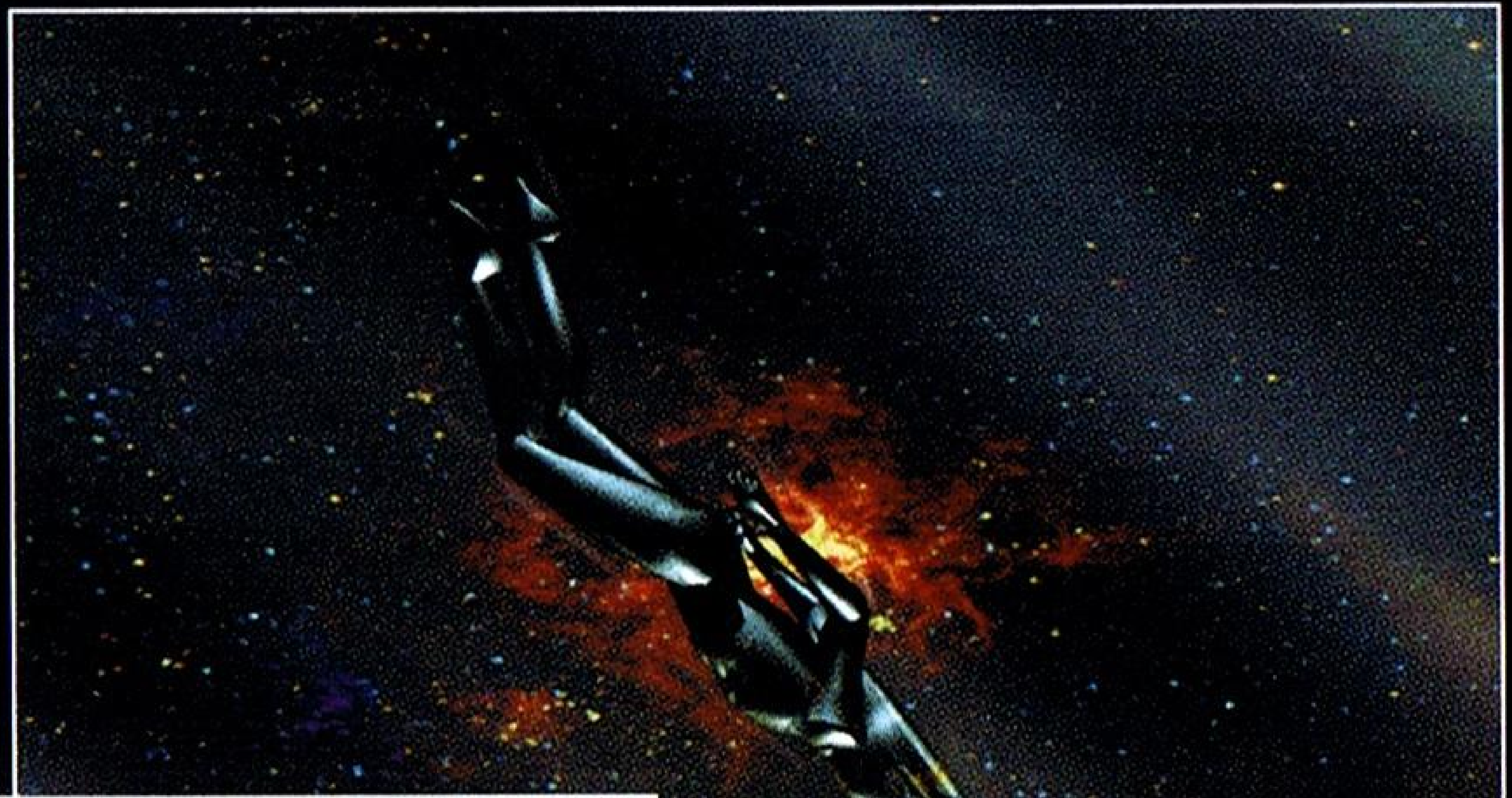


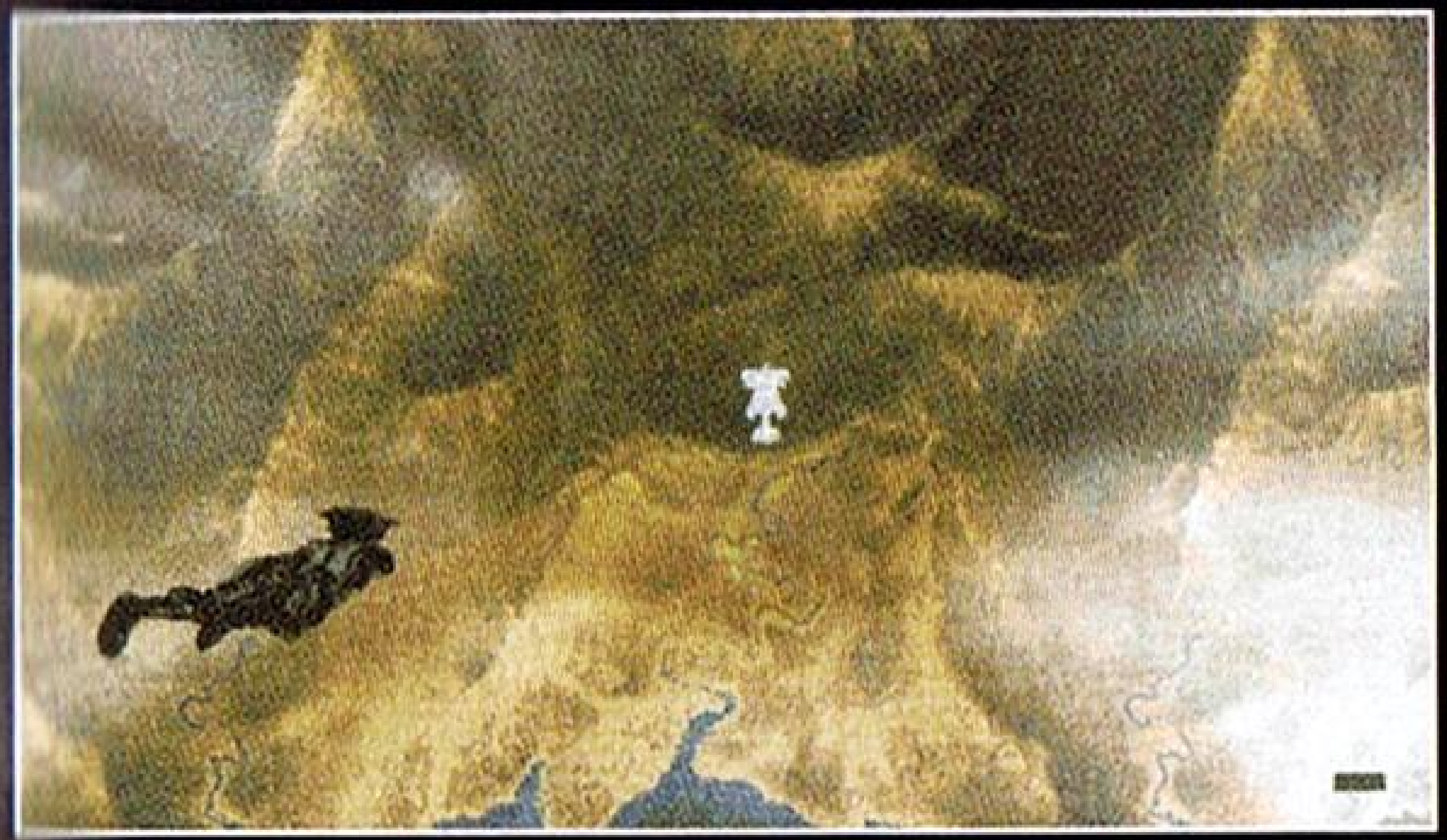




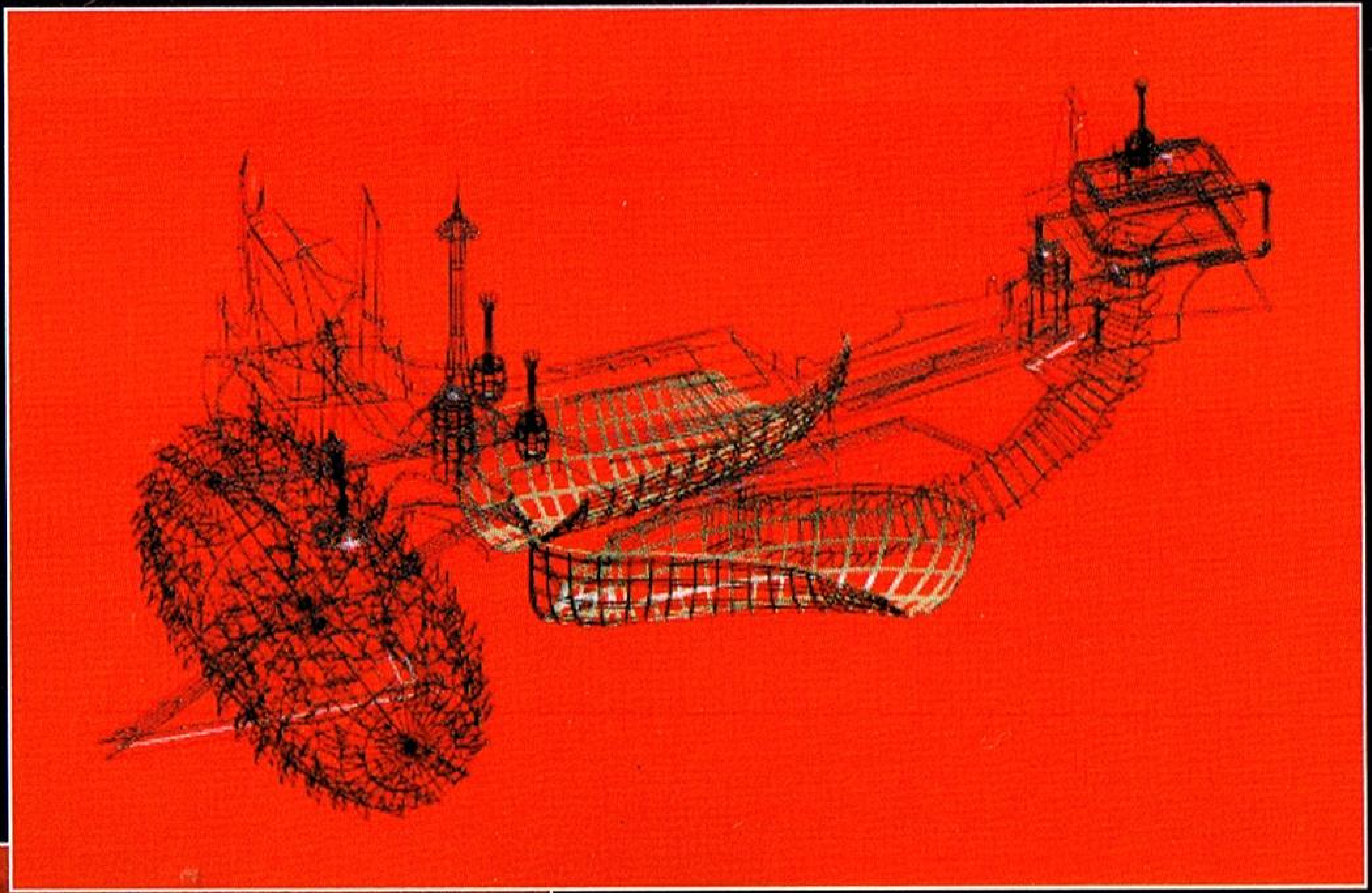


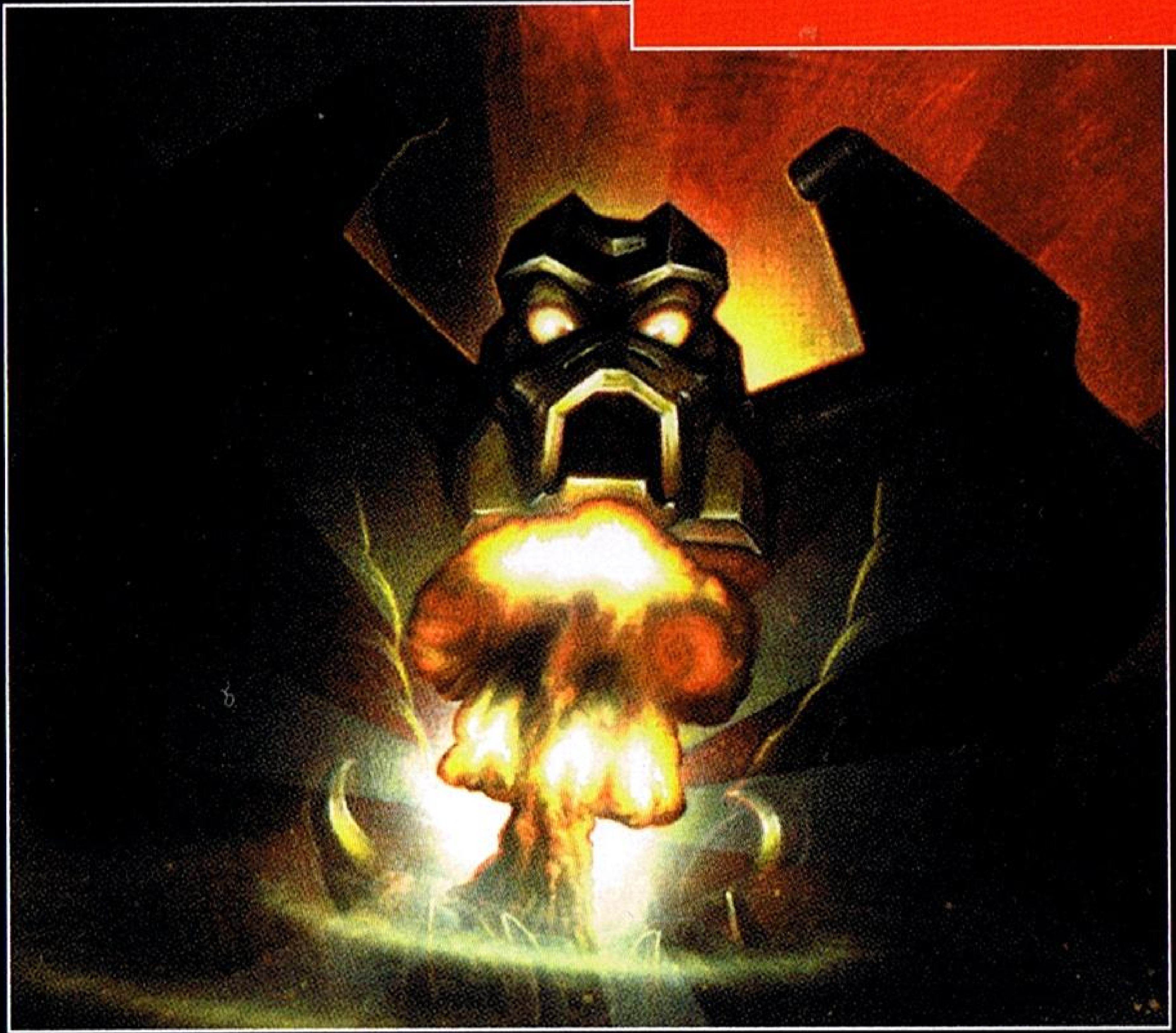
Early on it was decided that the gameplay would be divided into several distinct styles: 3D combat, which makes up the bulk of the gameplay, and the ‘freefall’ sections that precede each level. The early image above shows the vehicle originally intended for Kurt to use. The concept was eventually scrapped in favour of the ‘suit’ idea which now graces the game.





As you can see, the concept for the freefall section changed quite dramatically. In the final game, this section comprises a simple 3D 'fall' as Kurt hurtles down the energy streams with the aliens trying to shoot at him.





The levels were all designed by different members of the *MDK* team and are all 'true' 3D environments. The wire frame image above illustrates the complexity of one of the early levels in the game.

Although the game draws most of its energy from the violent events that occur throughout, the team was keen to retain a degree of humour in the gameplay. So even though Kurt would be crossing the levels destroying everything in his path, it was decided that some of the weapons used should be a little ridiculous. Of those that made it into the final game, one of the earliest designs came in the form of the 'world's smallest nuclear bomb' which is a somewhat drastic tool used for opening doors (among other things.)

Kurt

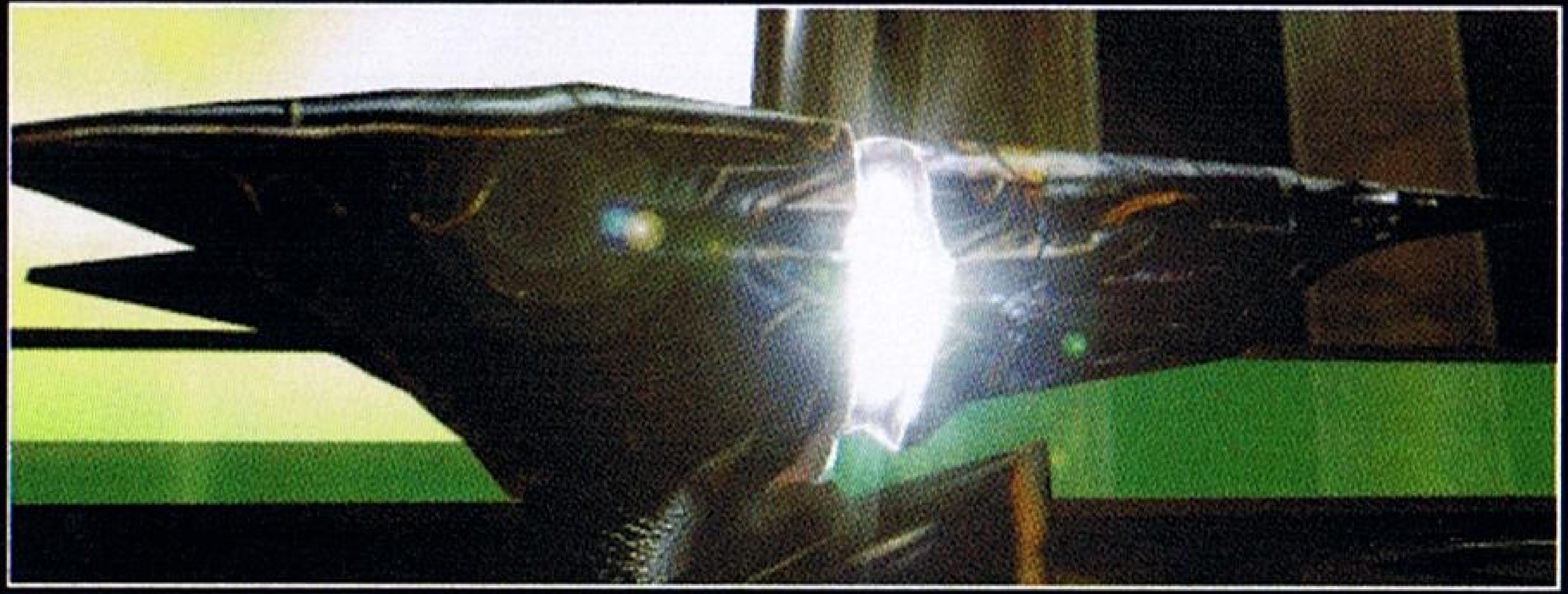
Once the basic concept for the game structure had been decided, the team moved on to the development of the characters. Aside from the early sketches of each individual character (which you can see in the "Who's Who" section of this book on page 8), it was most important to develop Kurt's appearance so that all of the desired gameplay elements could be implemented.

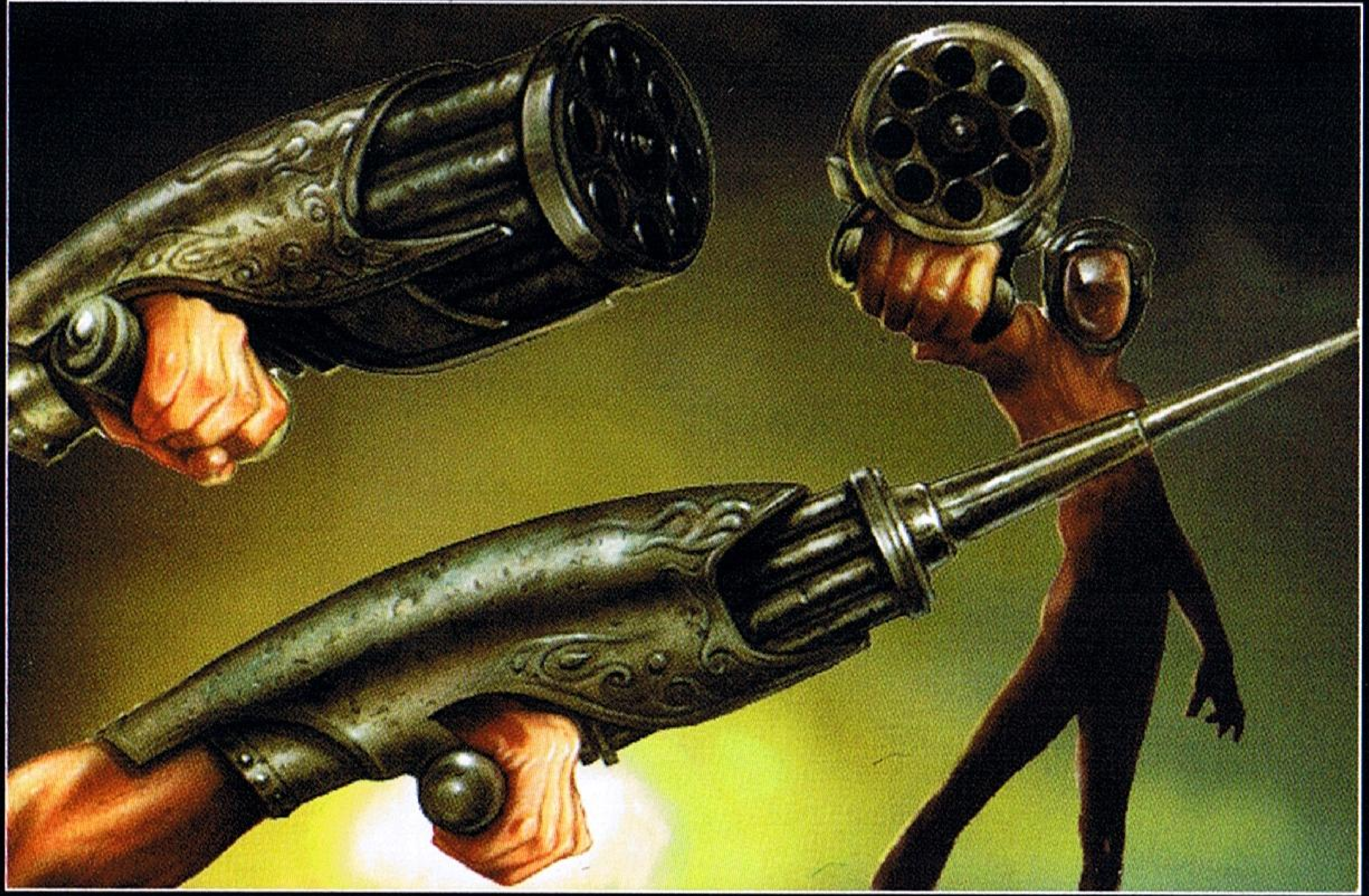
After ditching the idea of a vehicle for him (see above), it was eventually decided that Kurt's body armour would be a self-contained unit that included all the necessary gadgets and gizmos. As you can see from the images here, the various ideas went through a number of changes before the final Kurt suit that appears in the finished game was eventually settled upon.

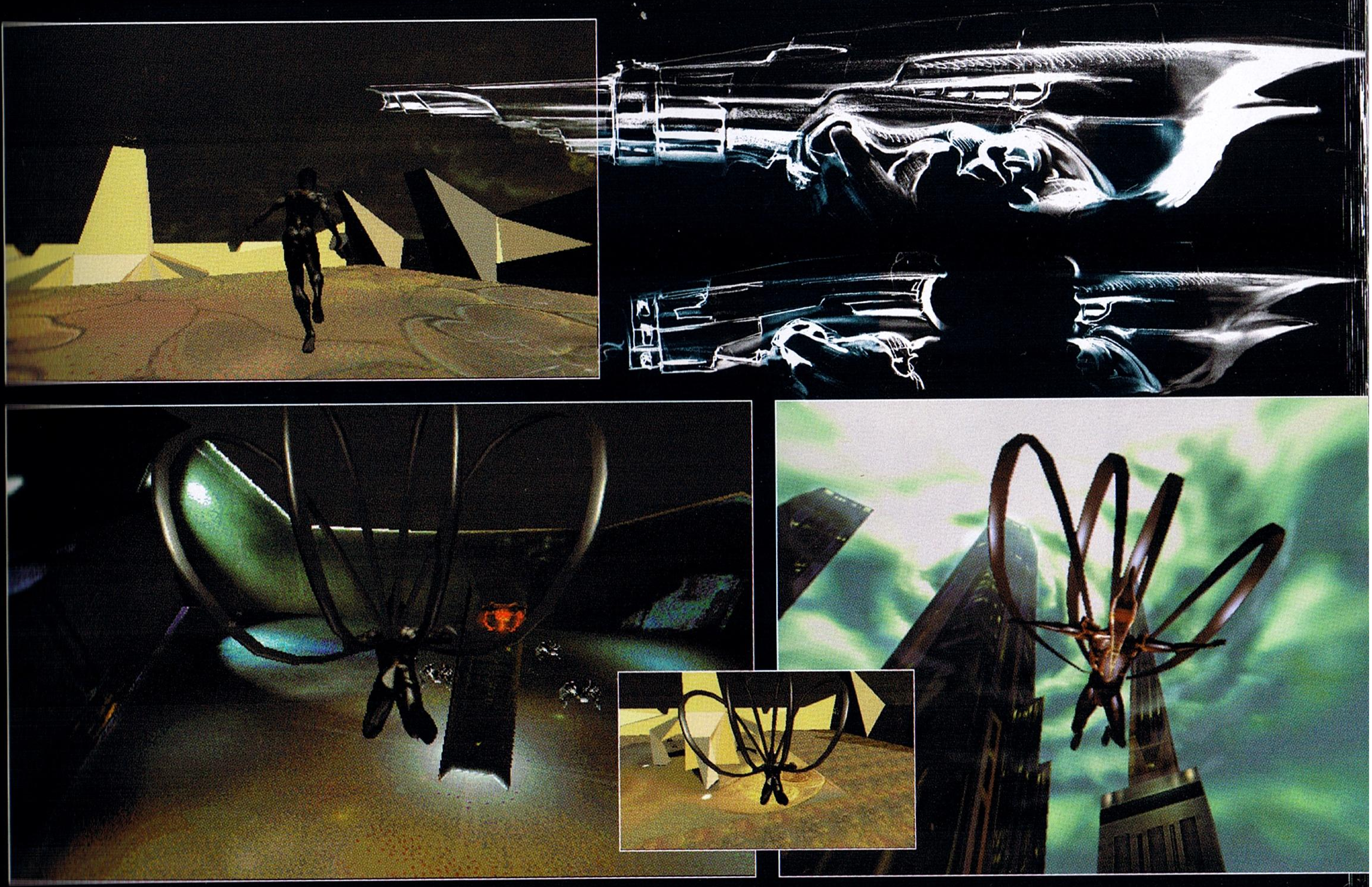
The most important element for designing Kurt involved the transition between the basic 3D combat and the 'sniping' mode. After a number of design alterations it was decided that the gun would act as an extension of the helmet, and in so doing keep everything both compact and self-contained.

From the early drawings shown below, the original helmet design required Kurt to use his hand to fire the gun when it was in 'sniper mode'. In the final design, this is no longer necessary and allows for a far more stylised approach that also doubles as an effective 'nose cone' for the freefall sections.

The gun/helmet combination is not the only important element of Kurt's suit design. At a later date in the design process it was also necessary for Kurt to have some way of breaking his fall when jumping from some of the higher platforms in the game. This came in the form of the parachute mechanism that fires from the back of the suit.



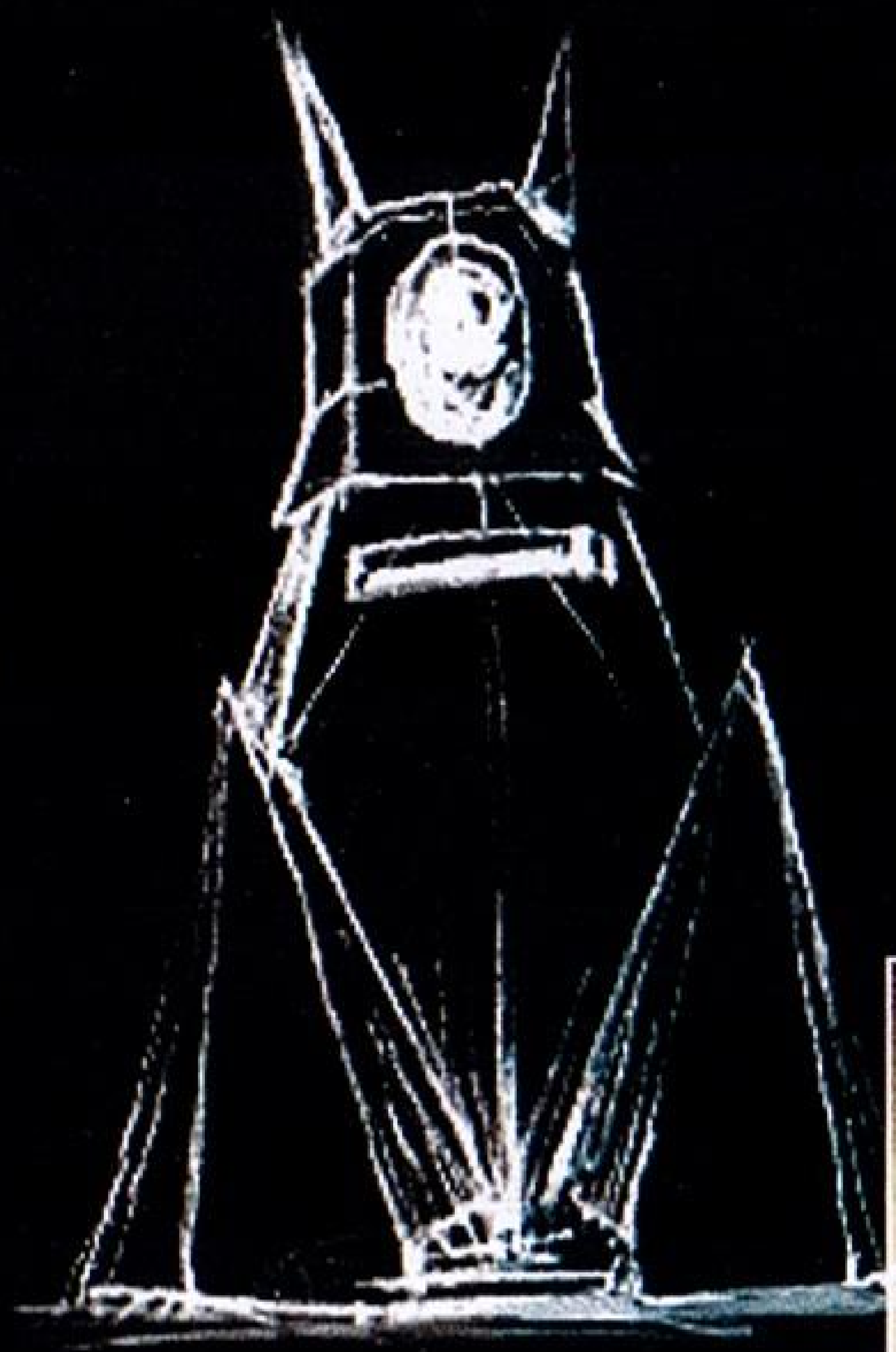


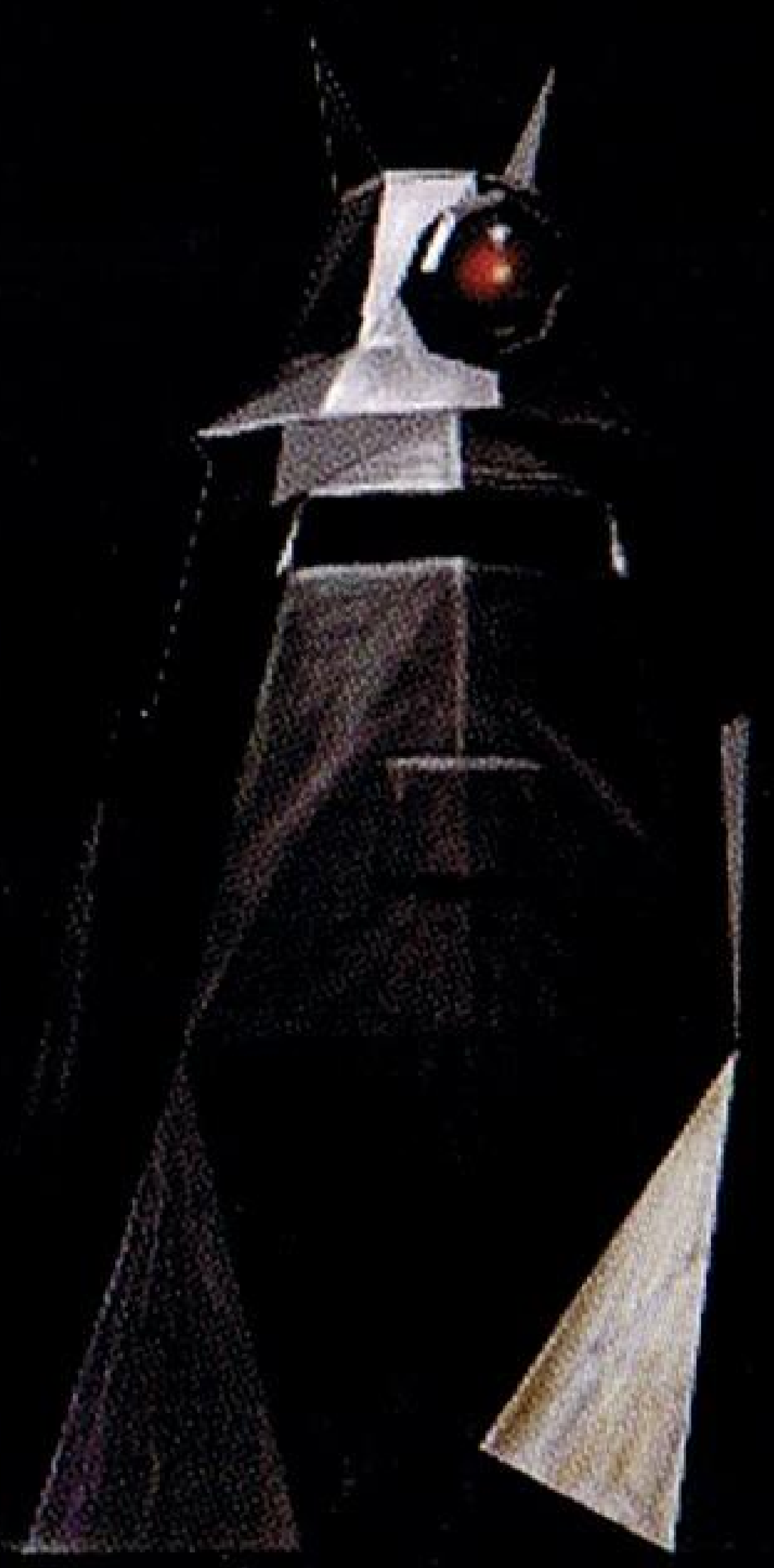


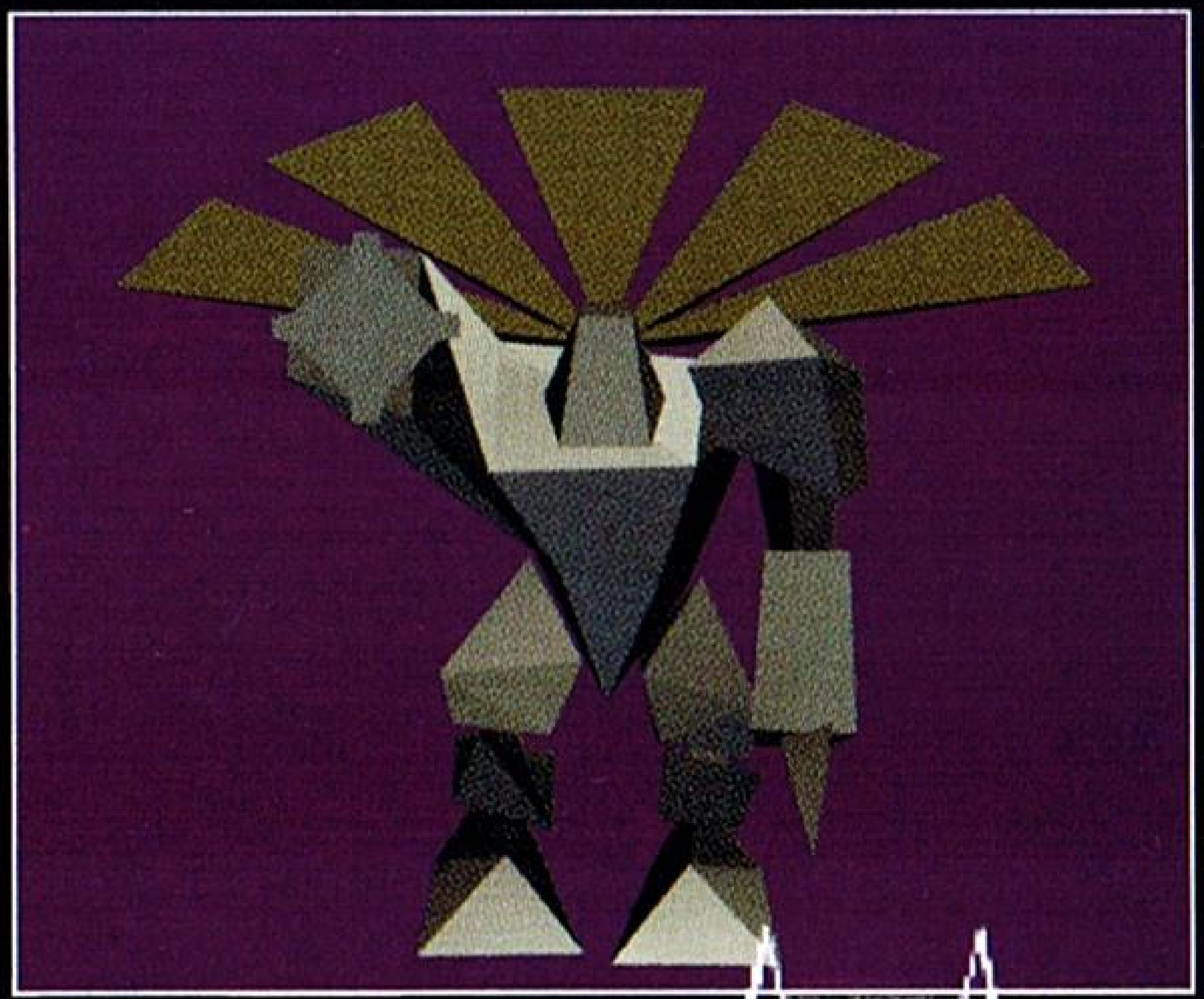
Bad Guys

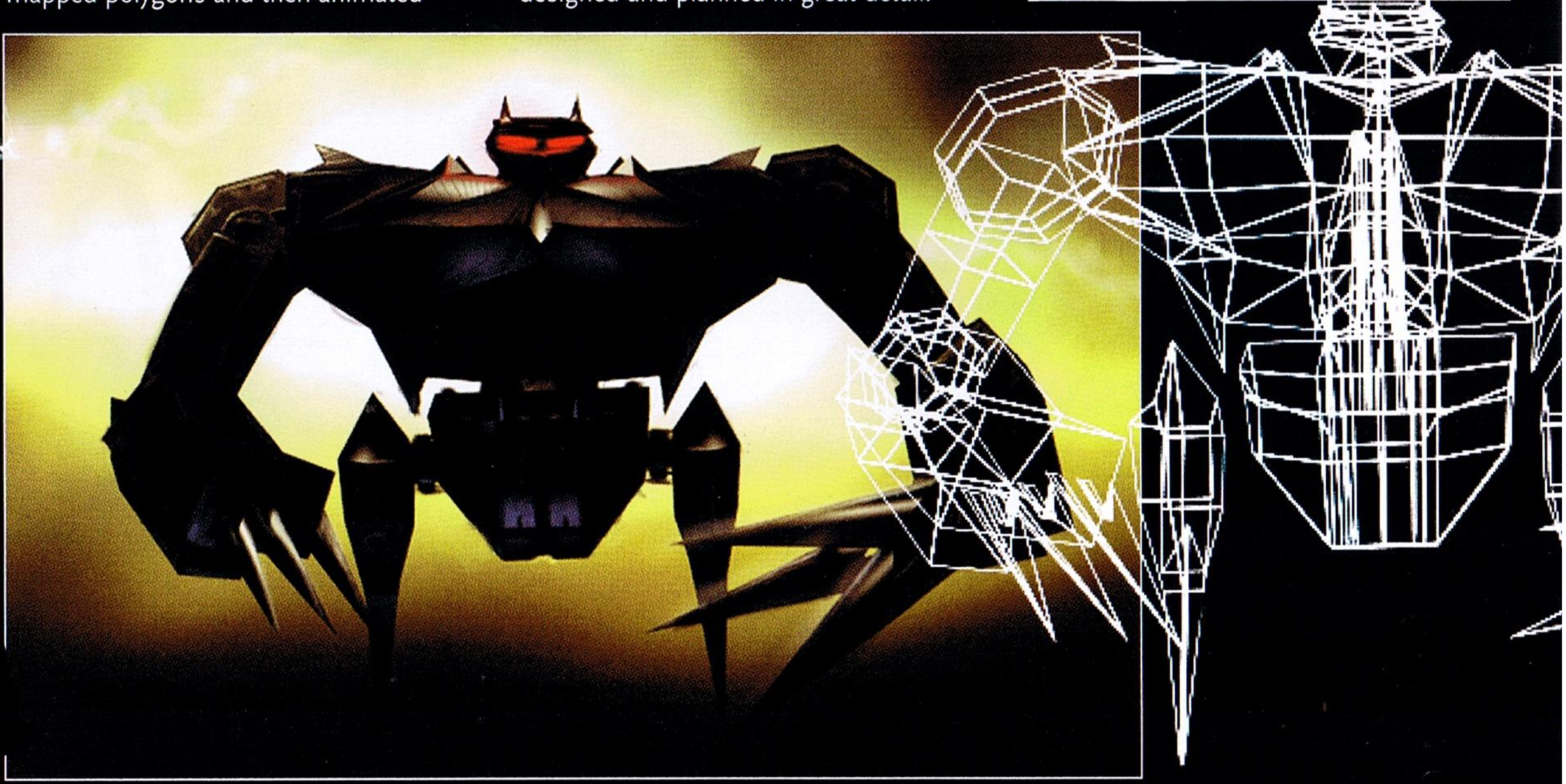
The enemies that appear in *MDK* are vastly different from those you find in the majority of 3D action games. Aside from the artificial elements which are covered elsewhere, the other main difference comes from the way in which they have been constructed graphically. Each of the bad guys was meticulously sketched out before being built as a 3D model. When placed into the gaming environment, all the aliens are generated using texture-mapped polygons and then animated using the information gathered from the motion capture system.

The larger enemies are made from such complex polygons that when you shoot at them in 'sniper mode' you can take out individual parts. For example, you can blind robots by shooting out their eyes, or even render something harmless by shooting off weapons. The polygon construction is very important and each individual character had to be designed and planned in great detail.









DEVELOPMENT NOTES

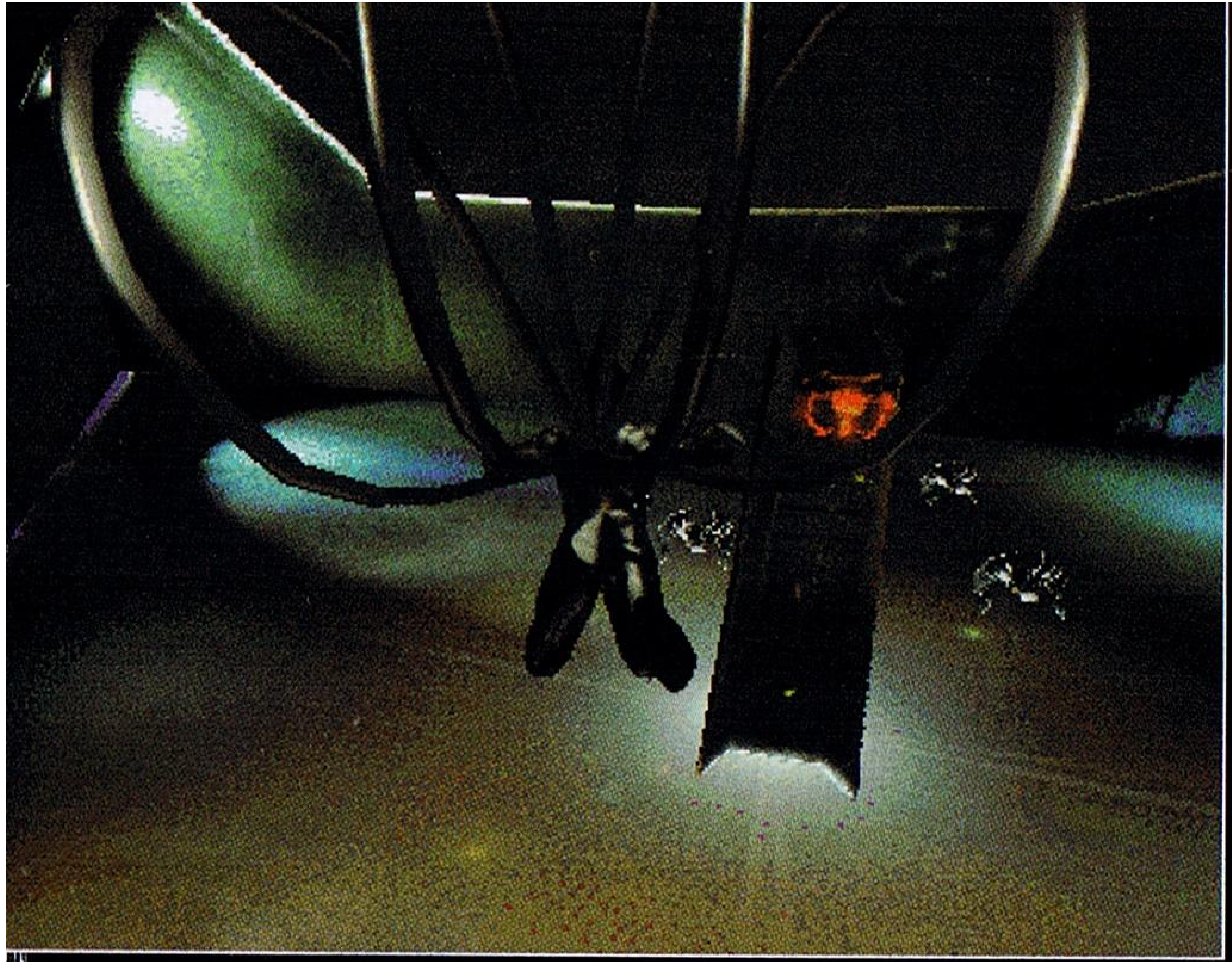
As you've seen, the concept for *MDK* is somewhat sophisticated, and in order to ensure that all the features made it into the final game, the development team had to come up with various solutions to address the numerous potential problems. For a start the game would have to manipulate its graphics in a very different way from other products in the 3D genre. High resolution and a super efficient graphics code were needed to bring the required special effects to life... and if all the desired gameplay elements were to make it into the final product, the team was going to have to find some clever ways of putting the whole thing together quickly so that MDK would make its release date.

When producing a large scale project such as *MDK*, 99 per cent of developers often use 'off the shelf' development aids to build their games. The problem with these programs is that they're nearly always generic tools that are primarily used for writing rather boring, sluggish business software – and for this reason they don't have the capacity to generate high quality, high-speed 3D action games.

To get round this crippling problem most developers usually opt for a set of simple programming tools that have been specifically designed to speed up the various development stages – but not many people realise that the whole process needn't stop with the tools. If a development team wants to be really smart, it can turn its back on traditional methods and develop its own programming language... which is exactly what Shiny has done with *MDK*.

Why? Well, if it's left to a programmer alone to work on the design of a game, it not only takes a long time but it also only reveals the creative flair of that one key individual. At Shiny, the artists and designers were involved in the design of the language – with the result that even though they were non-programmers they were also able to build levels on their own. To the designers at Shiny, 'level' doesn't just mean a bunch of walls with a few aliens thrown in for good measure – every level in *MDK* is different and that's because of the team approach. The result is a game that's been created in a much shorter space of time, with a wide variety of ideas taken from a diverse collection of individuals.

Basic level design is always important, but in many console games you have to crack puzzles as well. You're often given



the task of working out what moves to make in order to gain access to hidden (or difficult) places to reach. However, players shouldn't have to rely on cracking a particular puzzle to finish the game – yet if they manage to do so, they should be be rewarded. *MDK* has been built around this philosophy and painstakingly designed to bring this particular style of gameplay to the PC. Not only can you move objects around to help climb to secret places, but you can also steal other people's vehicles for your own use.

3D Graphics At Their Best

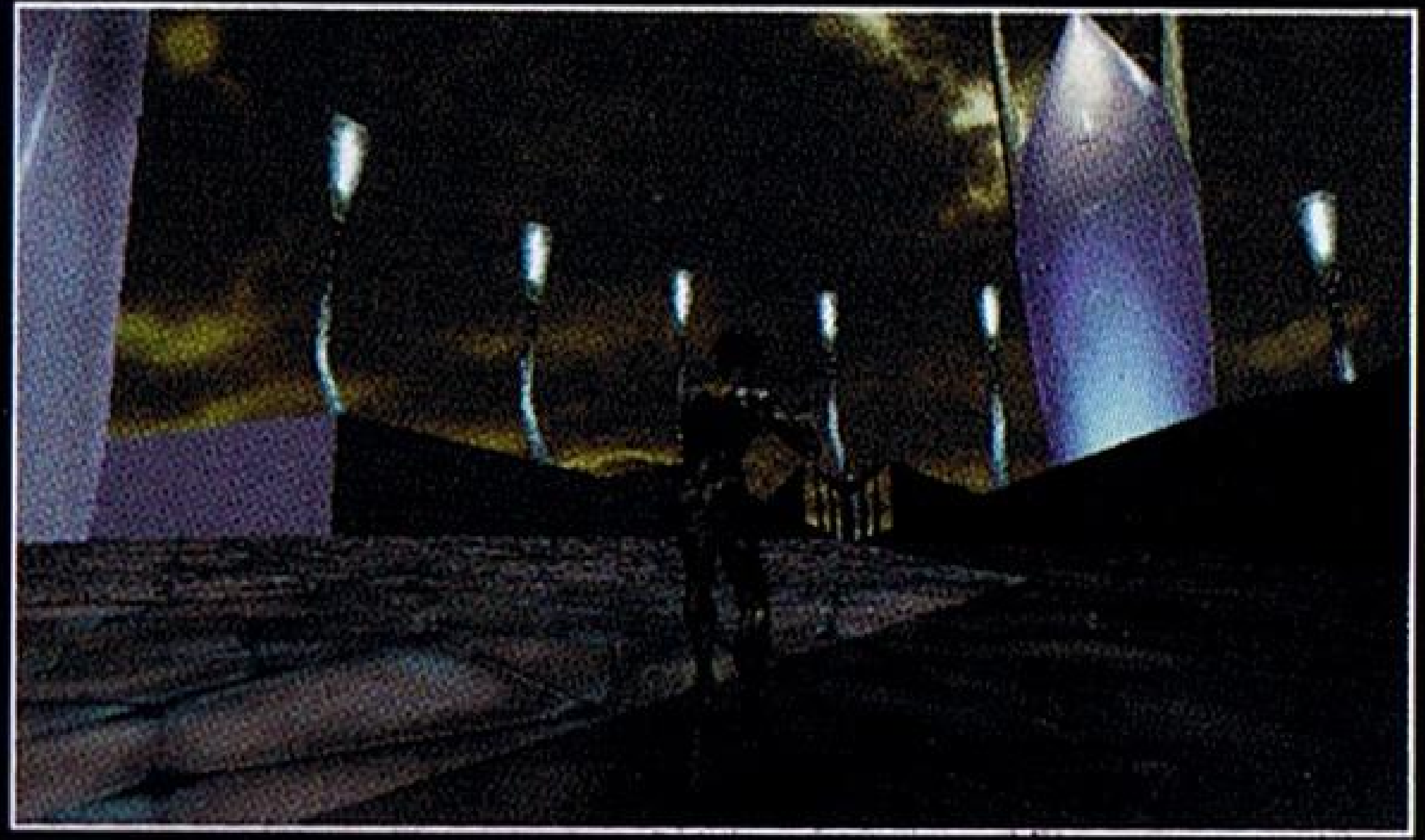
By their very nature, 3D games house a wealth of on-screen information that needs to be moved around. It's often the case that when there's too much information to display on-screen at any one time, the game code has to throw some of it away, hoping that the player won't notice. You may have seen this in many of the 3D racing games that appeared last year: trees in the distance will suddenly pop up out of nowhere because they're supposed to be in your field of view. This process is called clipping, and needs to be done well in order to look convincing. A bunch of clever programmers have developed a trick called 'fogging' to counter the difficulties with clipping. Fogging hides the clipping effect by burying it beneath a bank of hazy 'fog' in the distance. The 'pop-up' effect is still happening – it's just that now you can't see it.

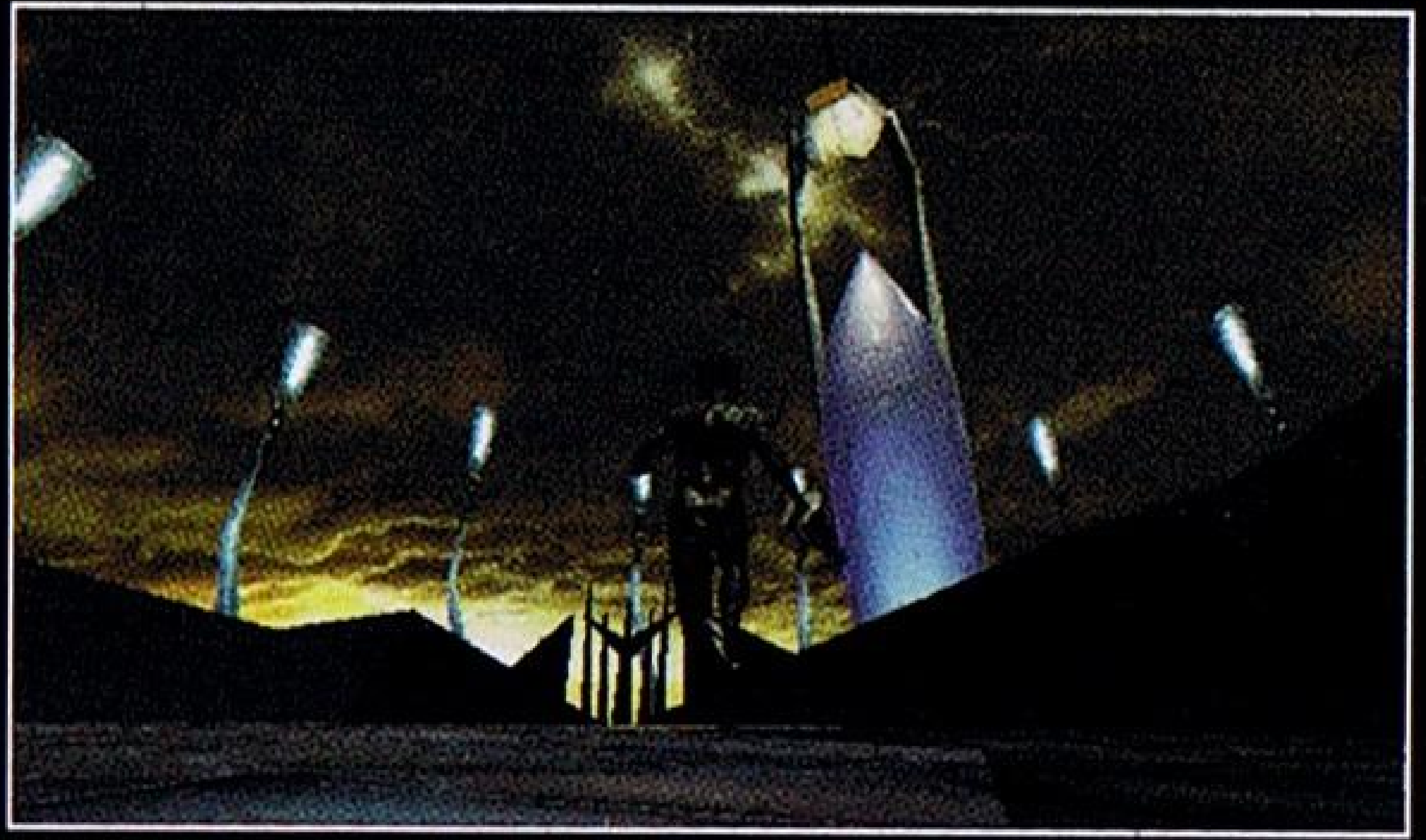
But there's no clipping in *MDK* – and you can see so far into the distance that it's possible to shoot somebody a mile away.

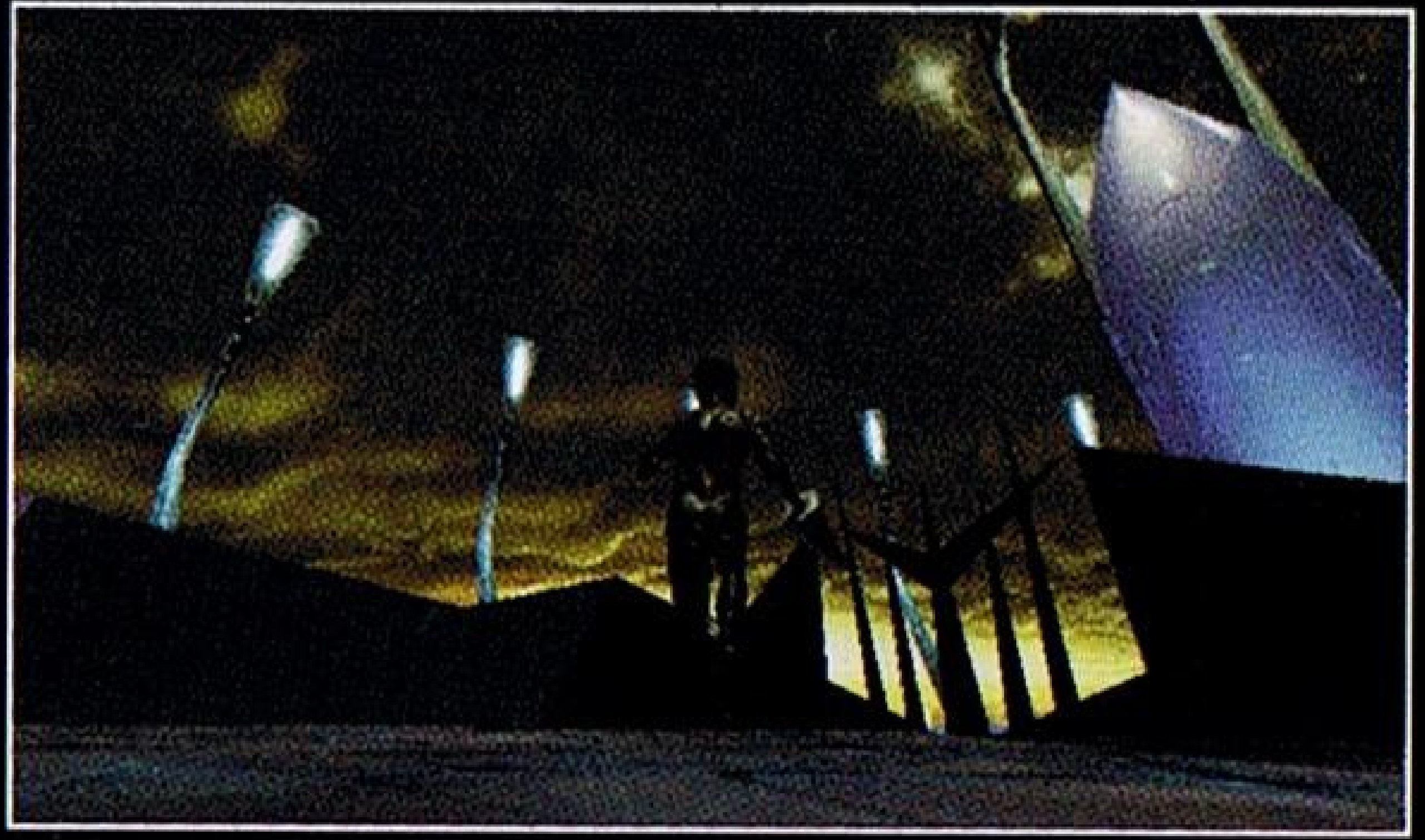
The other important graphics issue is speed. Most PC games use really big pixels in low resolution to make the player think that the game is running fast. However, if you play the game in SVGA mode with all of the detail switched on, more often than not it will run slower than a sleepwalking tortoise. Sadly, the response from many developers to this problem usually runs along the lines of: "It's not our fault your Pentium isn't up to scratch – you'll have to upgrade".

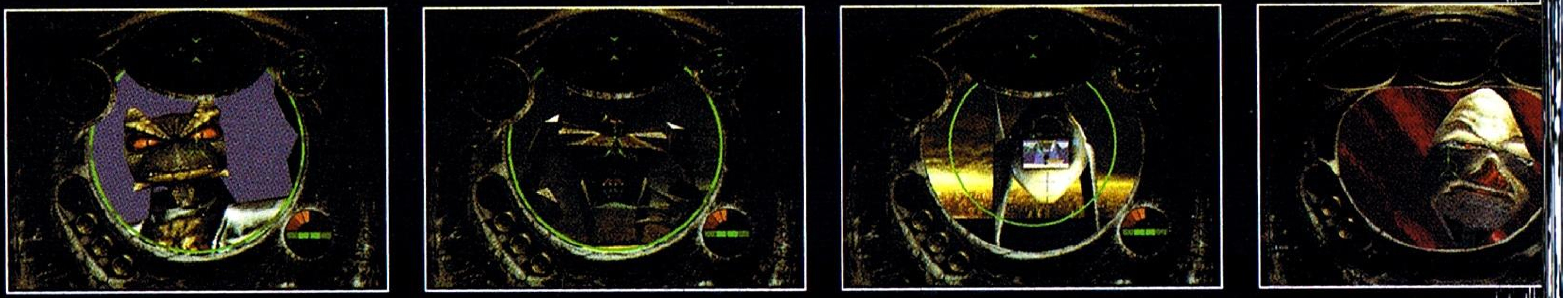
This argument doesn't wash with Shiny and it was something the team wanted to address right from the start with *MDK*. Everyone on the team has learnt (from developing games on far less powerful machines) that you have to make the best of what you've got. The PC is a marvellous piece of kit compared to many consoles, and slowness isn't acceptable on those machines... so why should it be on the PC?

The team at Shiny has something of a bee in its collective bonnet when it comes to the 'feel' of games. It believes that if









something runs either slowly or jerkily, the player's response time is screwed up and an important gland in your brain goes "yuck!". The team reckons the solution is simple – the game needs to predict if something really important is happening on screen and then focus on the player's responses rather than the graphics. Basically, the game should care more about the player than the screen. 99.999 per cent of developers have yet to realise this and sadly continue to pour all their attention into the quality of the visuals.

But how do you speed up a game? Shiny's method is straightforward: simply play the game over... and over... and over. Any time it slows down, the designers move things around, speed up the code, change the artwork... whatever it takes to keep the speed up. The goal that the team had in mind was to sustain a frame rate of 30 fps (frames per second) on all machines.

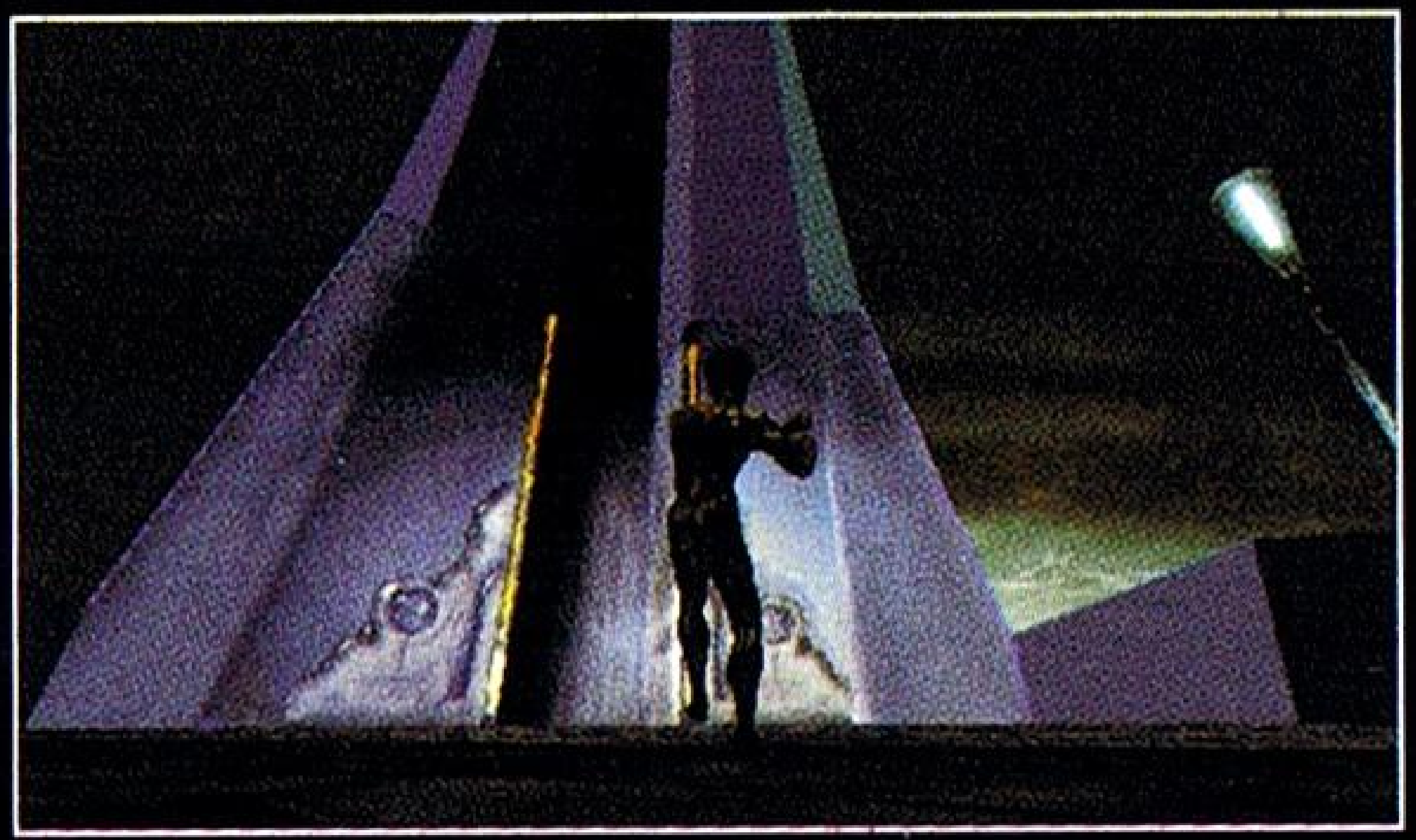
Enemy Intelligence

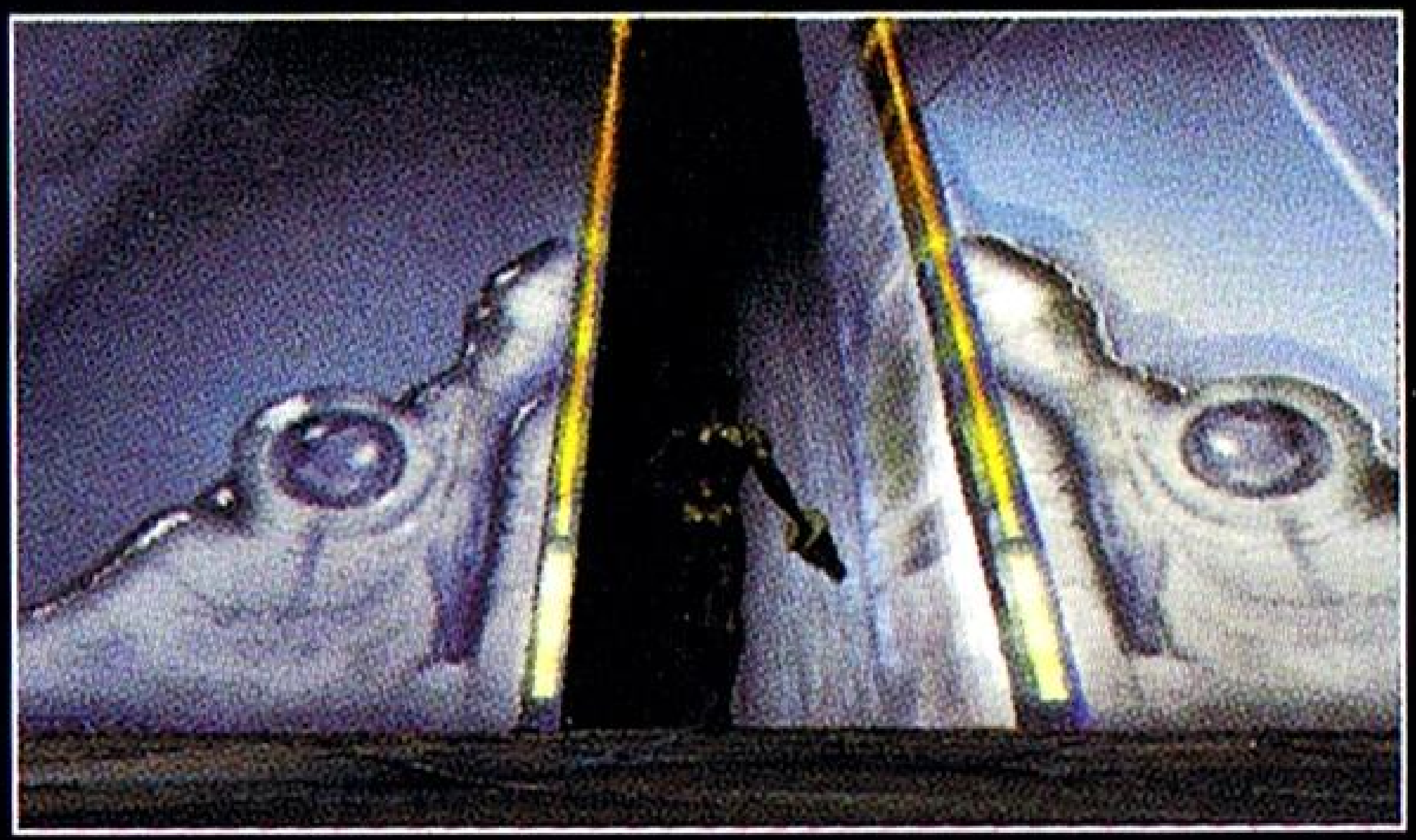
Aside from graphical quality, the other big issue in game design these days concerns the artificial intelligence code that's used to drive the aliens or non-player characters (NPCs) that appear in the game. It's no longer good enough for the 'bad guys' to just appear in droves with their guns blazing – NPCs need to behave in a convincingly realistic manner.

With *MDK* Shiny has tried to use artificial intelligence to instill a certain amount of personality into each of the characters. Rather than zombie-like creatures that just follow set paths through the level, the baddies in *MDK* take on a life of their own – be warned because they'll run around looking for you and then hide behind a wall... they'll team up with their mates and try to flank you... or they'll even run away if they think they don't stand a chance.

The intelligence applies to the actual combat as well. If you're very accurate with your gun, the bad guys will simply keel over and die; if you only manage to injure them, their whole attitude will change and they'll behave in a far more cautious manner.

In addition to this, you'll also notice that the enemies have eyes. This isn't just a cosmetic effect – the AI system enables them to actually 'see' what's going on around them. If an enemy is up high on top of a building and looking your way when you happen to step out of the shadows, the AI system will trigger all of the other bad guys around you as they each communicate with each other in order to close in on your position.





Punter Power

One thing that the team really enjoys during the development of any product is the focus testing. This is where the Shiny crew get to sit in a room hidden behind mirrored glass and observe about 80 gamers play under their watchful eye.

The reason that this is a fundamental stage in development is simply because you can become too familiar with a game when you've been playing it day in, day out – with the result that the team could have ended up ignoring a glaringly obvious problem. This is where the focus tests excelled, clearly revealing that hardly anybody reads instructions, on-screen messages or bothers watching rendered sequences more than once.

Full Gore!

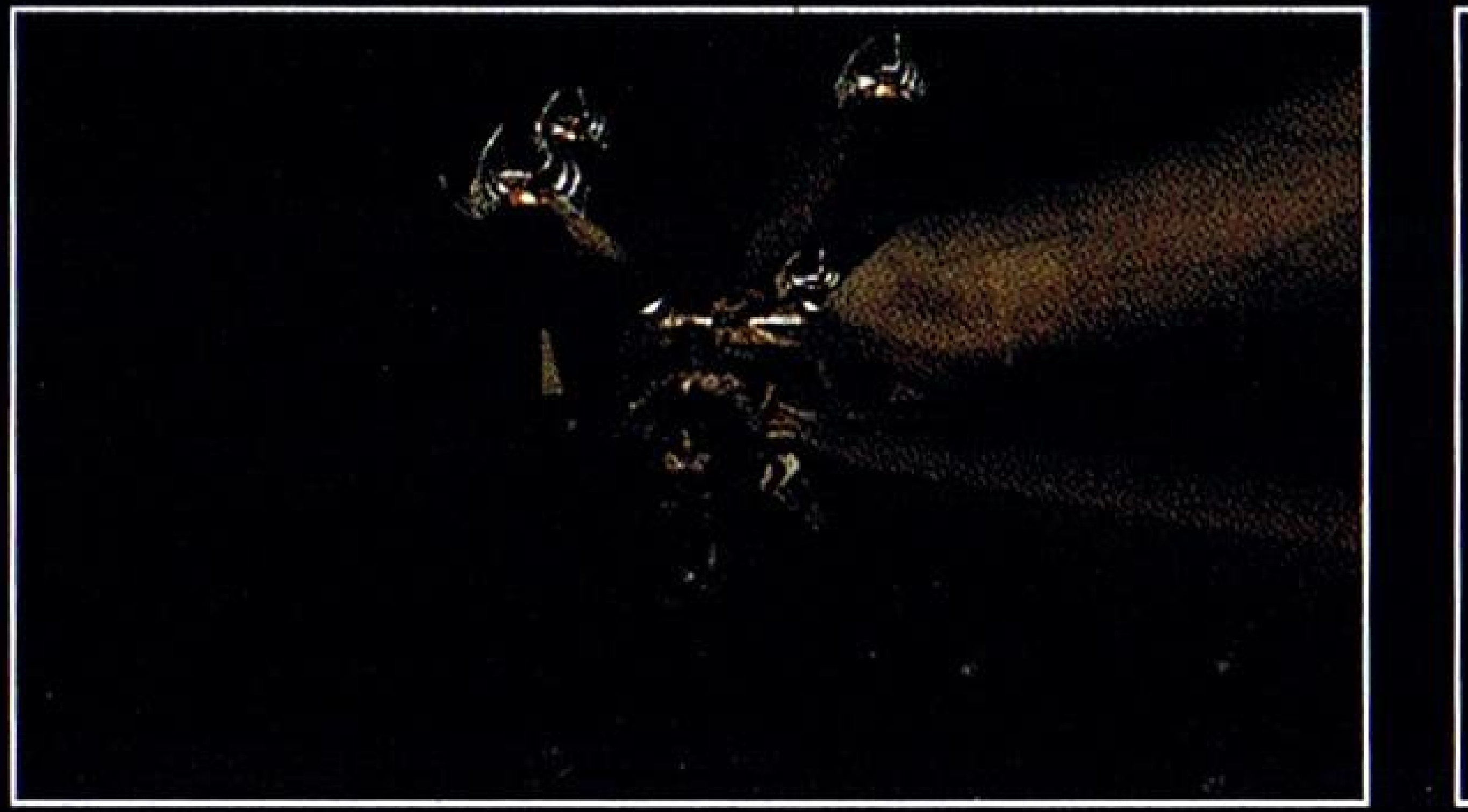
In order to ensure that even the finest details of *MDK* were as accurate as possible, it's rumoured that the team ordered a number of 'death' tapes from the very darkest corners of the Internet – purely for research purposes, of course. These 'death' tapes allegedly show people dying in every way possible (including being blown up) followed by what they look like afterwards. Yes, Shiny became video nasty central – going to any lengths to make the game as convincing as possible.

A Note From Shiny Entertainment

"Many PC gamers have been ripped off by some of the video cards currently on sale. Making a game for a machine that can be crippled simply because the consumer has made a bad purchasing decision is sad news for the Shiny team, as players won't get to see our game in its full glory. Having to turn off detail sucks and can be avoided by ensuring that you make an informed choice when buying a video card.

"The problem in a nutshell is this: video card companies primarily develop their cards to speed up Windows applications and many seem to forget that gamers need to see results in other areas.

"The packaging will often claim that a card is "blazingly fast", but this is often only the case for business applications that don't require the manipulation of hi-res, polygon-based graphics. We performed a number of tests during the development of *MDK* and found that some cards can be ten times slower than others. You can severely hamper a P166 with a bad video card – and you may only get the kind of performance that you'd expect from a P90."



Motion Capture

One of the technical features that dramatically stands out in *MDK* is the fact that both the central character and many of the creatures that inhabit the lands of the game are animated in an incredibly realistic way. This has been achieved using a system that is becoming more and more important in video games development: motion capture. For those of you who haven't heard of it before, it's a system that allows programmers and artists to 'record' the way that real people and creatures move and then apply this recording to computer-generated images, so that they can be animated in the most realistic and believable way possible.

The systems used by games developers are many and varied, but they are all fundamentally similar and make use of the same technology. Shiny's motion capture facility is handily known as MoCap and Shawn Nelson, the team's expert on the subject, has tried very hard to talk us through the processes that make the system work. In the end though, it was decided that a cartoon is a much easier way of illustrating a point...

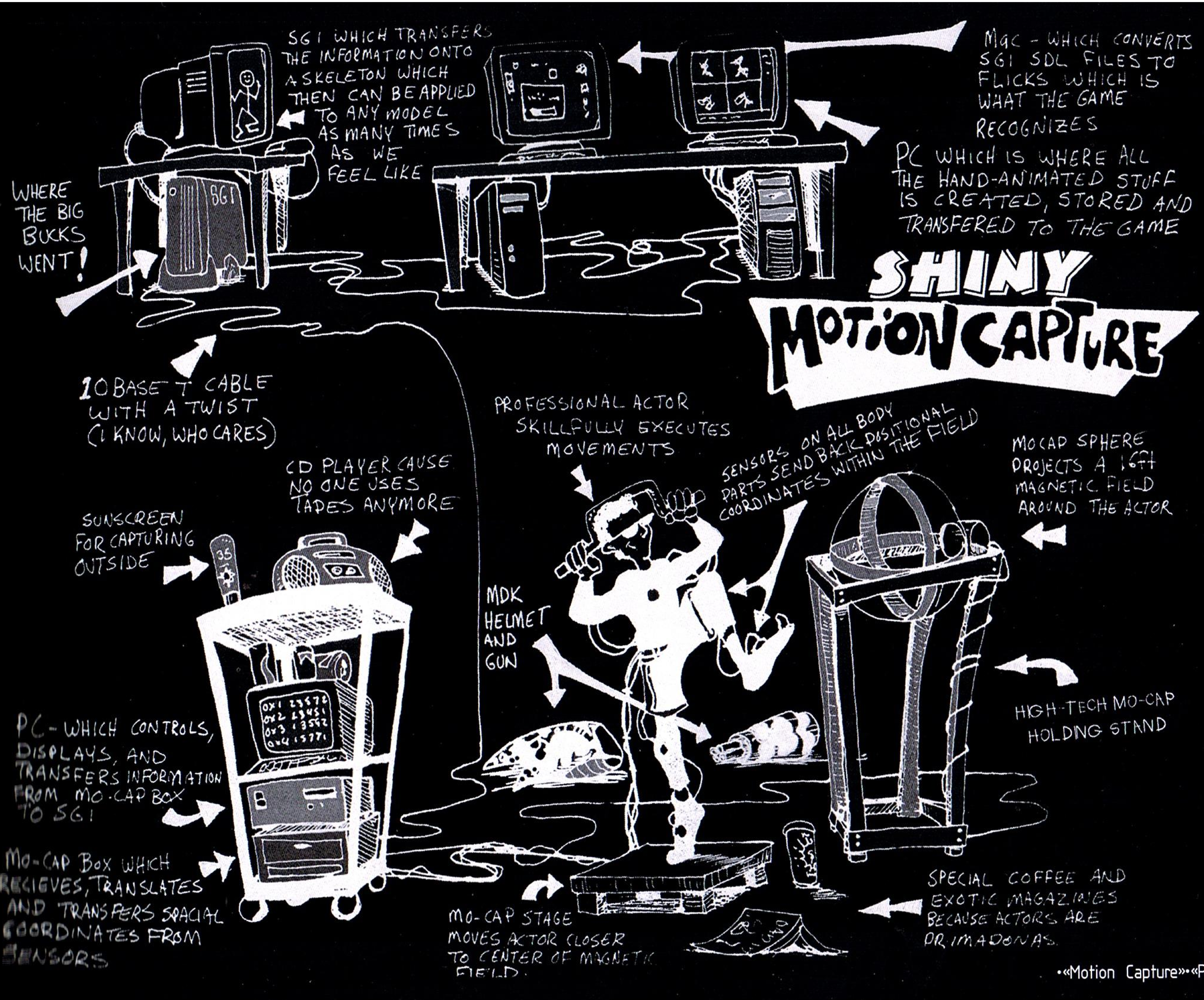
Okay Shawn, so you've got this system called MoCap but do you understand everything about it – do you have a technical background or are you more artistic?

After obtaining a Bachelor's degree in sculpture at the San Francisco Academy of Arts, I went to California Institute of the Arts in Valencia for a year. From there, I was drafted to the University of Southern California where I got a Master's degree in computer animation.

Dumbo question for the people at the back, or most of the civilised world... What is motion capture (exactly)?

Motion capture is a system where you put censors on an actor and he moves around within a projected magnetic field. The 3D point/space co-ordinate information is then translated to the data format

SHINY MOTION CAPTURE



SGI WHICH TRANSFERS THE INFORMATION ONTO A SKELETON WHICH THEN CAN BE APPLIED TO ANY MODEL AS MANY TIMES AS WE FEEL LIKE

Mac - WHICH CONVERTS SGI SDL FILES TO FLICKS WHICH IS WHAT THE GAME RECOGNIZES

PC WHICH IS WHERE ALL THE HAND-ANIMATED STUFF IS CREATED, STORED AND TRANSFERED TO THE GAME

WHERE THE BIG BUCKS WENT!

10 BASE T CABLE WITH A TWIST (I KNOW, WHO CARES)

PROFESSIONAL ACTOR SKILLFULLY EXECUTES MOVEMENTS

SENSORS ON ALL BODY PARTS SEND BACK POSITIONAL COORDINATES WITHIN THE FIELD

MOCAP SPHERE PROJECTS A 16FT MAGNETIC FIELD AROUND THE ACTOR

CD PLAYER CAUSE NO ONE USES TAPES ANYMORE

SUNSCREEN FOR CAPTURING OUTSIDE

MDK HELMET AND GUN

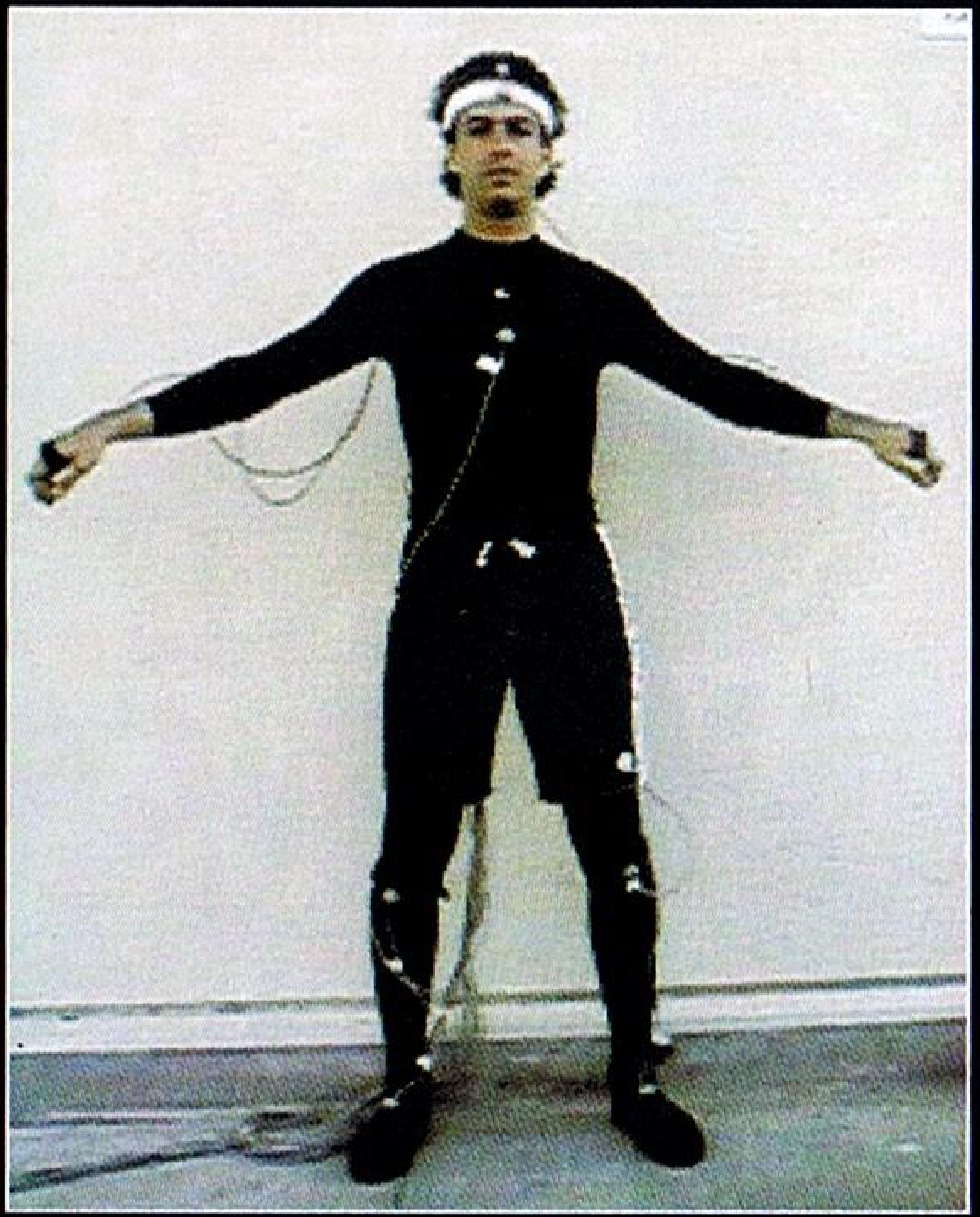
HIGH-TECH MO-CAP HOLDING STAND

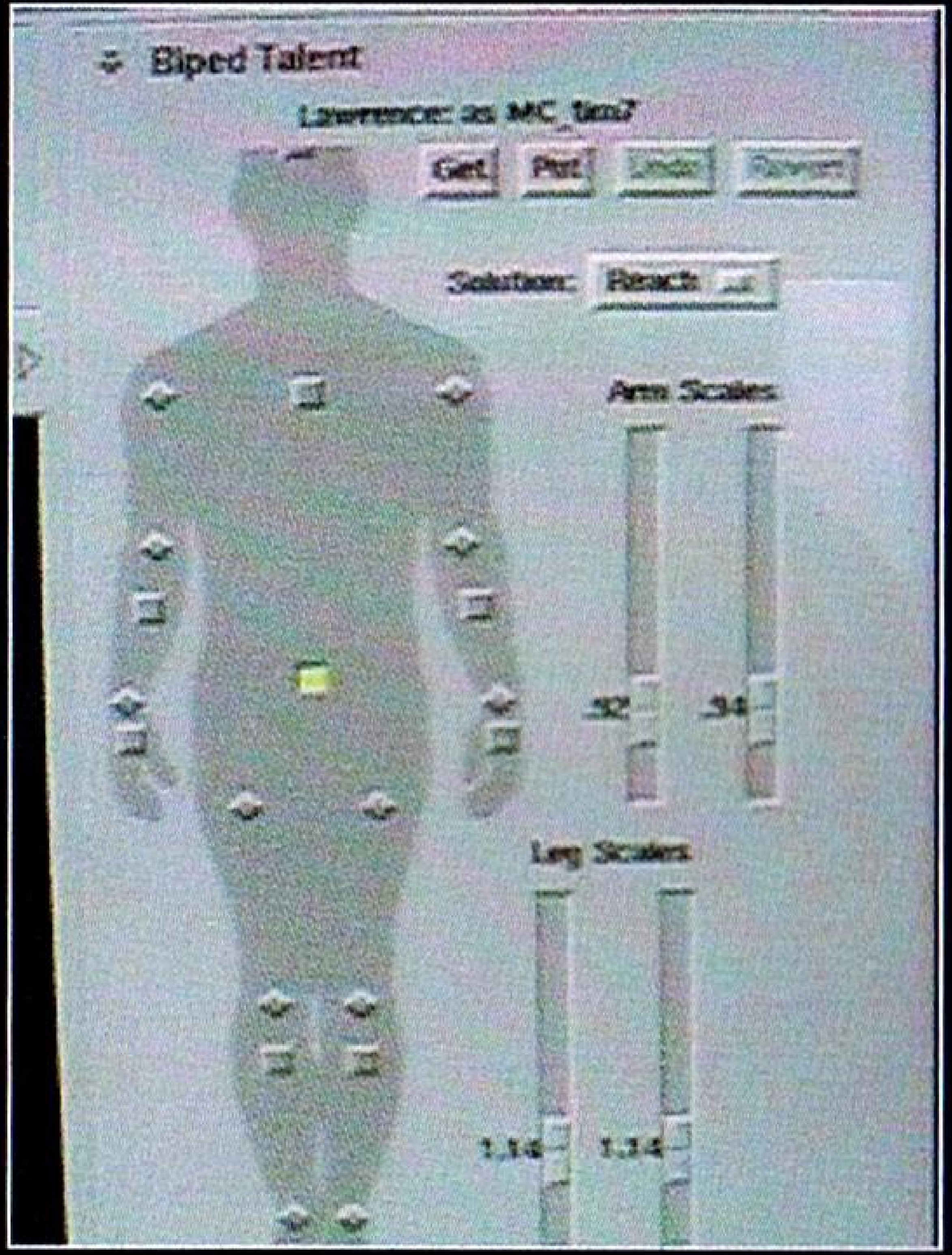
PC - WHICH CONTROLS, DISPLAYS, AND TRANSFERS INFORMATION FROM MO-CAP BOX TO SGI

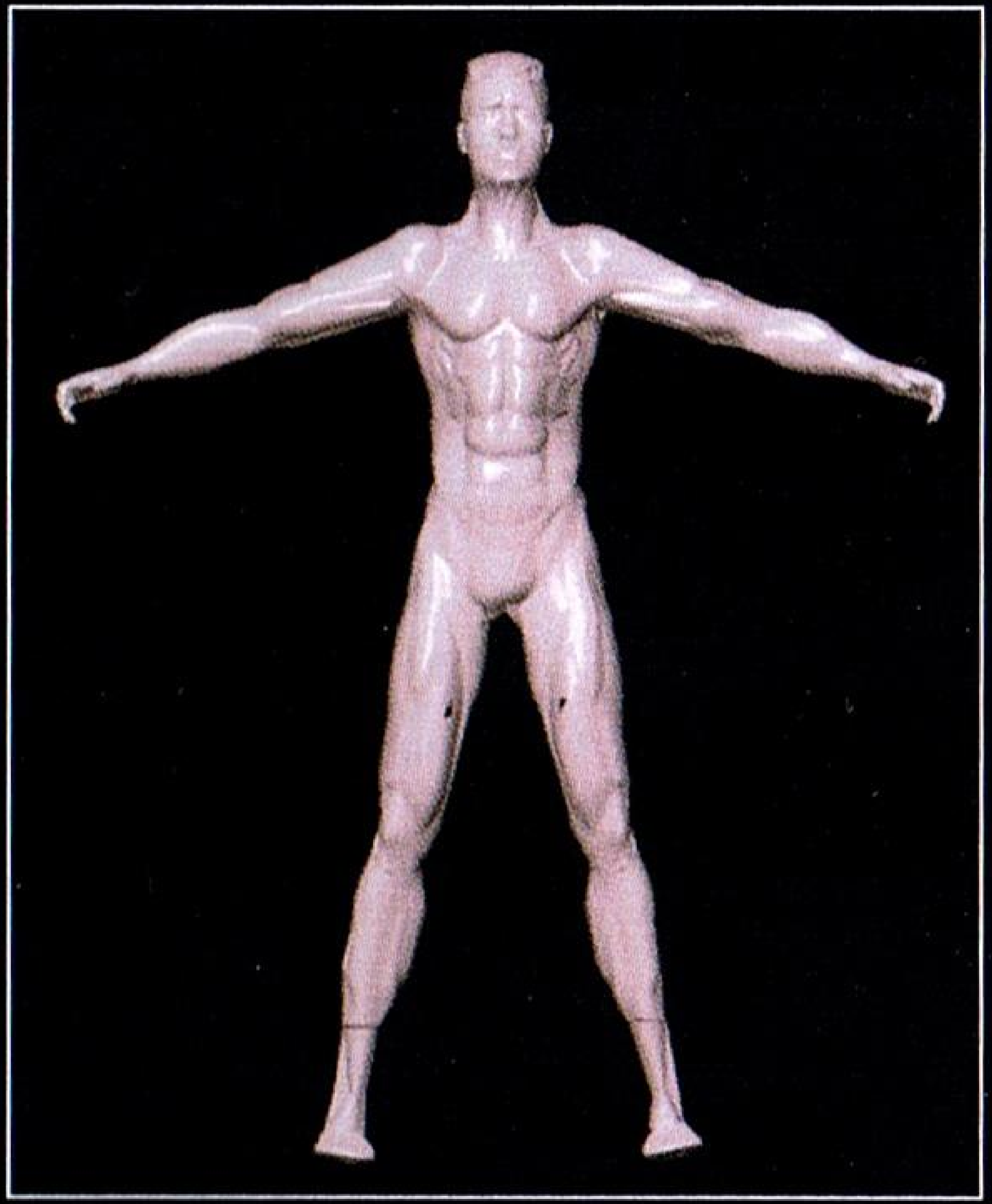
MO-CAP BOX WHICH RECIEVES, TRANSLATES AND TRANSFERS SPACIAL COORDINATES FROM SENSORS

MO-CAP STAGE MOVES ACTOR CLOSER TO CENTER OF MAGNETIC FIELD.

SPECIAL COFFEE AND EXOTIC MAGAZINES BECAUSE ACTORS ARE PRIMADONAS.







required by your software. In other words skeletons are animated using joints and the skin of the character is placed onto these joints. With motion capture you animate from the inside out using an SGI machine.

Why use SGI? What's so hot about it besides the hefty price tag? Is it really what it's cracked up to be for this sort of thing?

It's the only machine that is powerful enough to run the software that I need to use. I started with Softimage 2.5 and 3.0, and Power Animator 6.0. We are now using The Alias/Wavefront Power Animator 7.01.1 with a bunch of plug-ins like MS3 (Motion Sampler 3), Composer & Studio Paint 3D. So I decided to cancel my company Ferrari order and bought the $135,000 set-up.

Is it easy to get machines like that working? Is the system as simple as just sticking ping-pong balls all over someone's body and then hooking him up to an SGI box?

No way. I spent *hours* and *hours* and *hours* on the phone as I tried to get the calibration of our main character just perfect. Each time I thought it was right, our actor would put his hands on top of his head. Looking back at the screen, one arm might end up on the floor, the other might stick out of his mouth. It was *so* frustrating – then suddenly it all worked, the settings were perfect.

What is good about it?

You can record hours of animation in hours. If you make animation by hand with a pencil like Disney does, it takes years to do. Basically we get much more movement than an artist ever has time to draw. All the subtleties are there, the joints work like real joints and, most importantly, you can *feel* the weight of the character as he performs his moves.

...and the bad stuff?

Basically it restricts you to humans or animals. If you want to motion capture a shark, then you are in a world of hurt, literally. If you have a 20-legged monster that needs to do back flips, then you had better hope you have a great pet store near your office. I suppose you could tie 10 actors together.

Besides this, what restrictions are there?

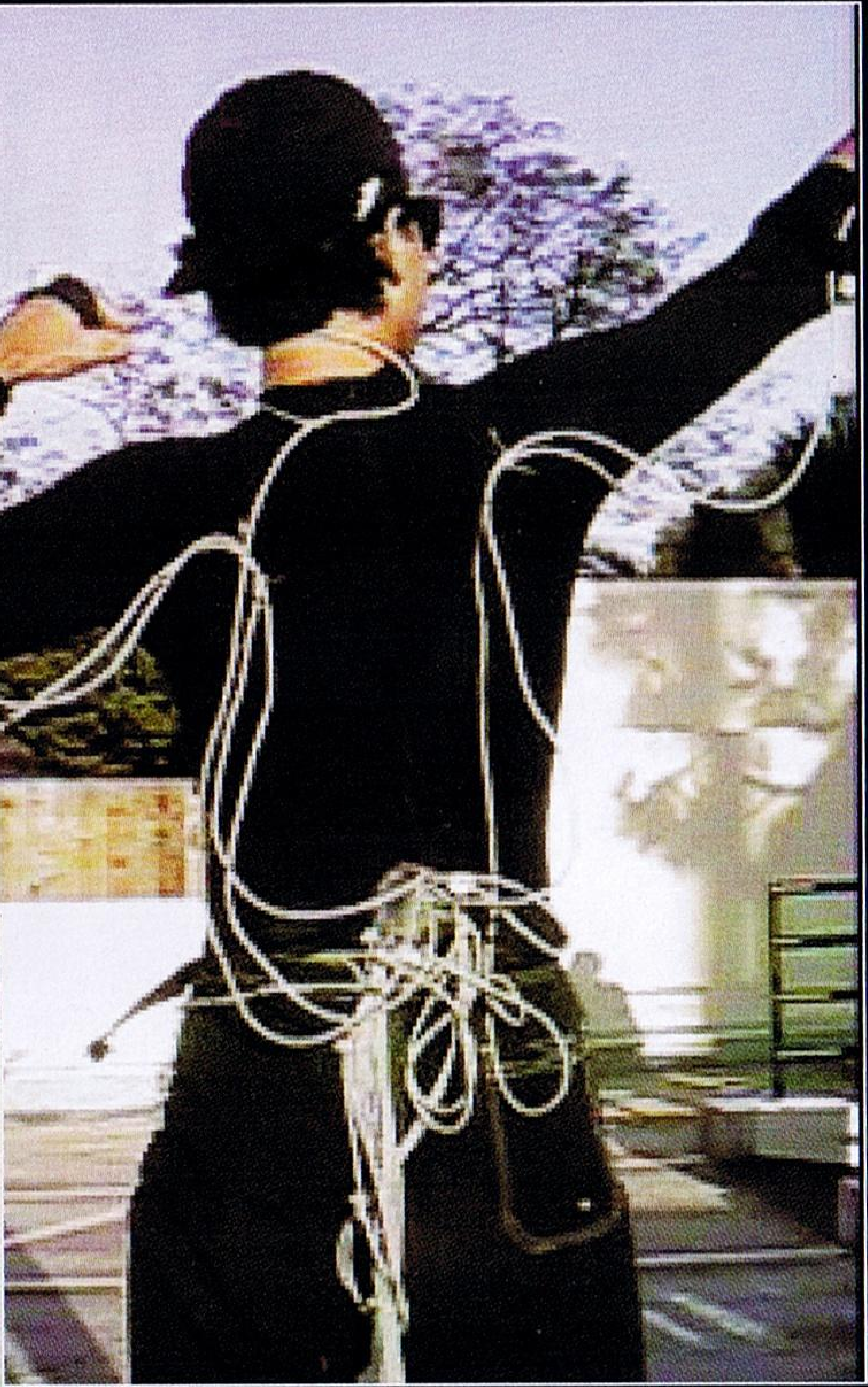
Space is a big thing. I had to build a stage to cut down the magnetic interference from the steel bars that were in our concrete floor. Doing that coupled with the cables tying the actor to the main computer restricts his movement big time. It hurts the actor if he does a dive and lands on the umbilical cable link, but I don't care about that.

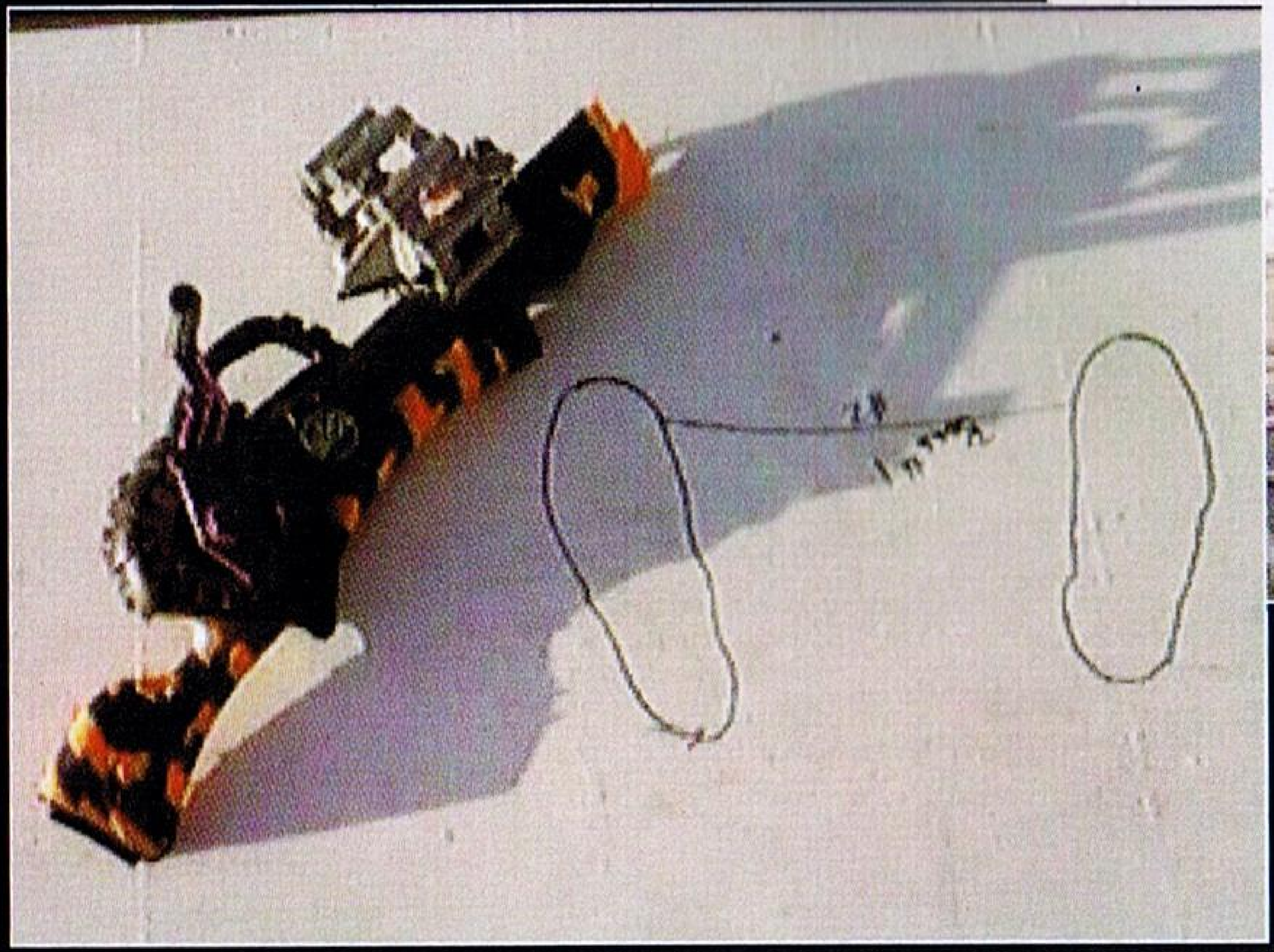
How many frames per second do you get with motion capture?

A conventional motion capture system uses up to 16 censors but we only used 11. Polhemus, the company that makes the MoCap system, says it's supposed to record at 50 frames per second but it only does 48. The silly part is that the Alias software can't take more than 30 frames per second. Although the data is sharper, thanks to the 48 frames per second, we can't read it all. From that point on we give our data to Andy (the lead programmer) so that he can work his programming magic.

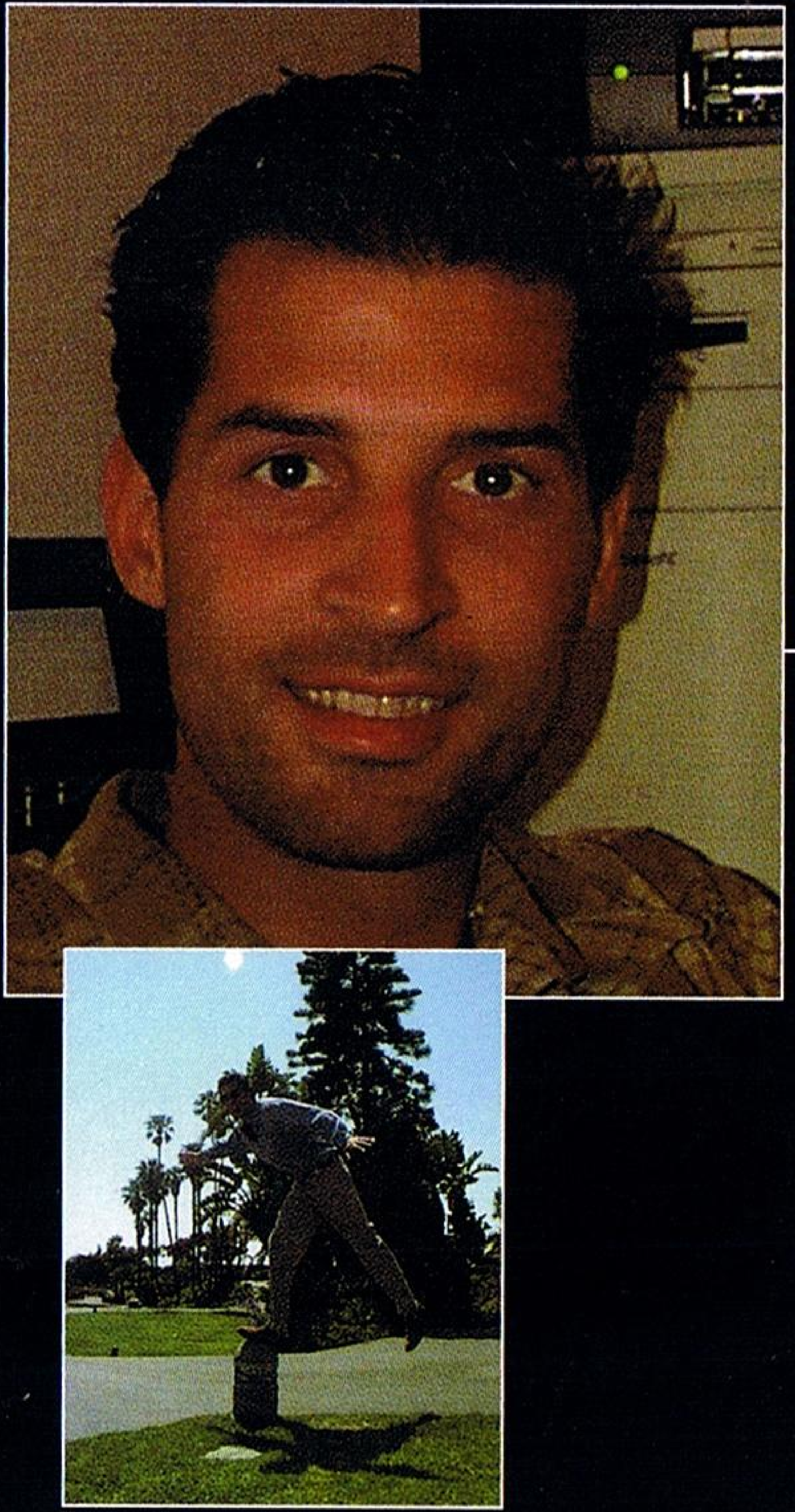
Is motion capture the future of animation in video games?

More animation, more movements, more move options, ten times as much animation, I think it's a good tool towards the future of video games. But remember, that I'm a traditional animator first and you'll never get rid of us.





The MDK Team

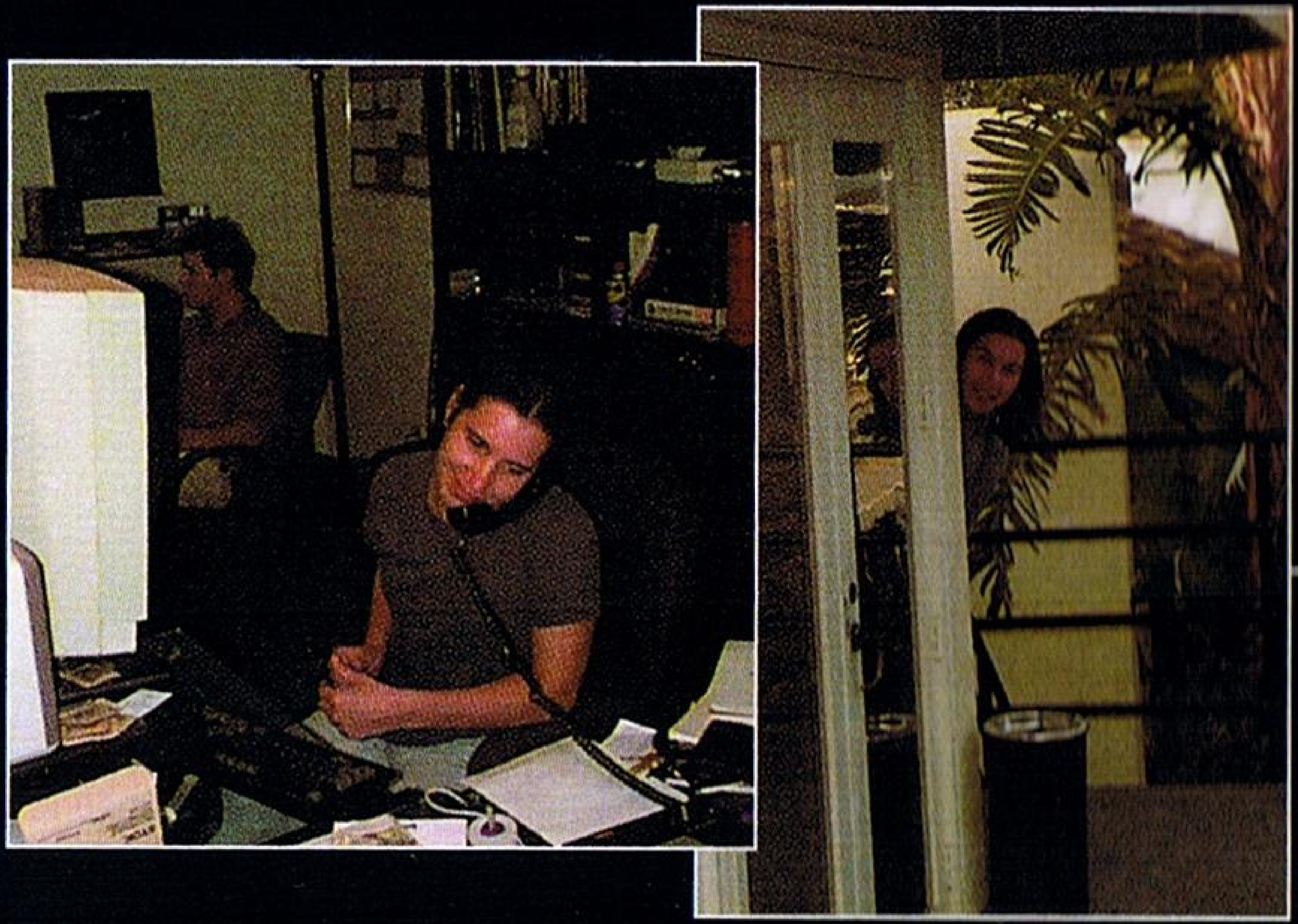


Dave Perry

At six feet eight inches tall, Dave Perry (President, Shiny Entertainment) is certainly one of the games industry's taller individuals. Over the years he has been involved in the video game adaptations of some of the cartoon world's biggest stars including – Teenage Mutant Hero Turtles, 7-UP's Cool Spot and Disney's Aladdin. As well as these achievements, he has taken his own creation, the spineless super-hero Earthworm Jim, to the same heights.

Nick Bruty

Nick Bruty (MDK Creative Director & Shiny board member) was born in Kent, England, but insists that he is half Scottish (especially after seeing *Braveheart*). Nick has worked with David for many years – ever since the *Teenage Mutant Hero Turtles* days.

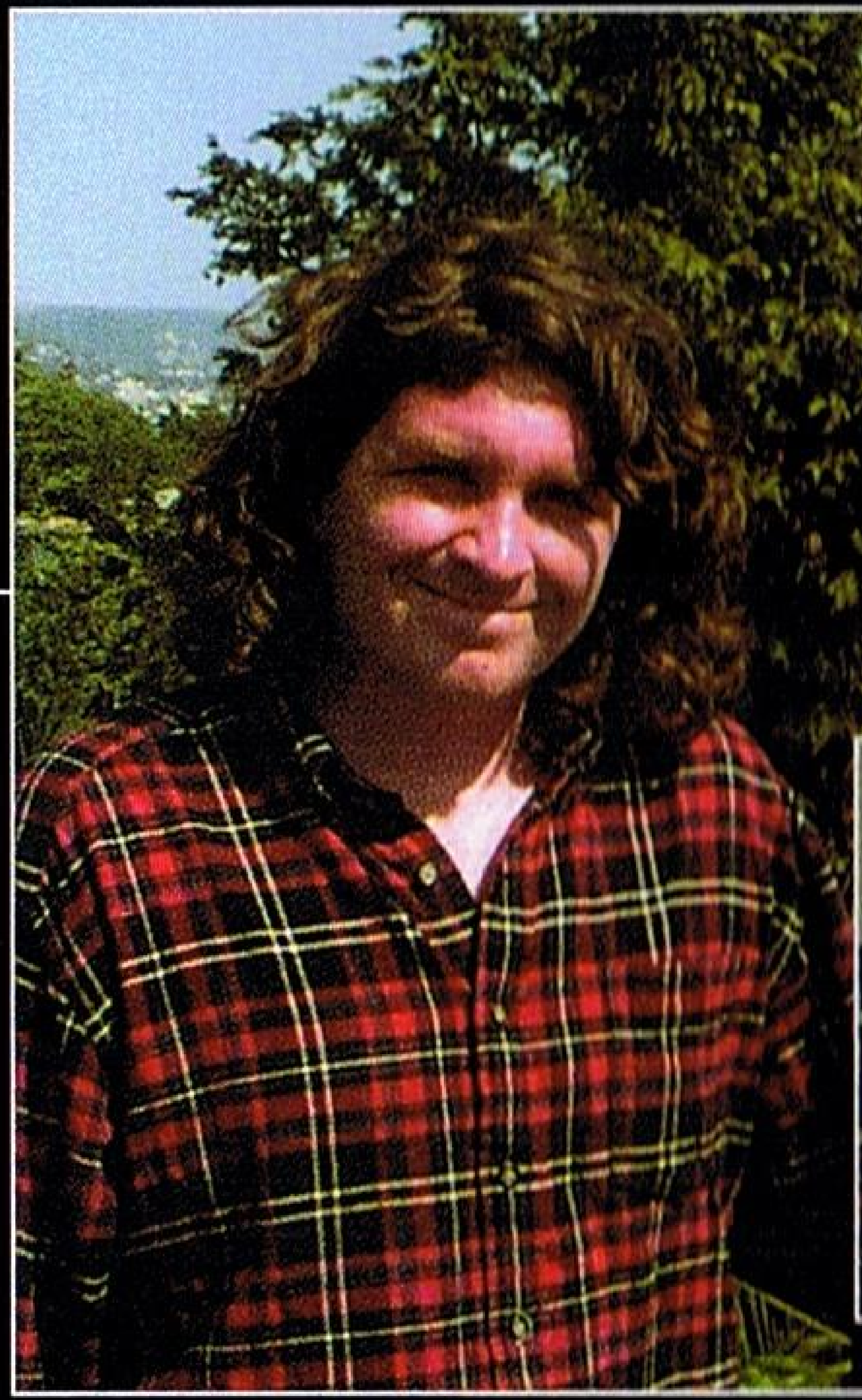


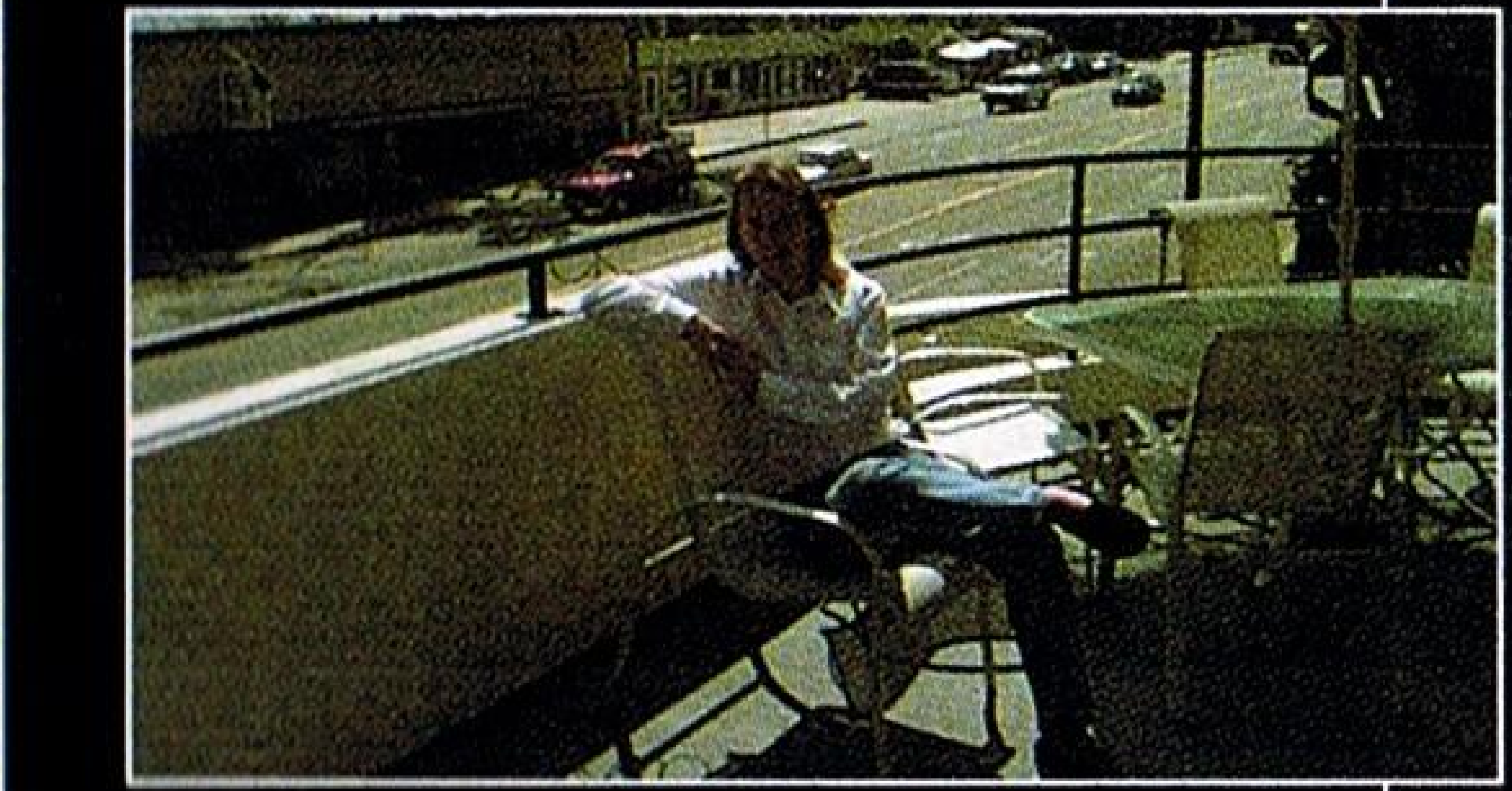
Bob Stevenson

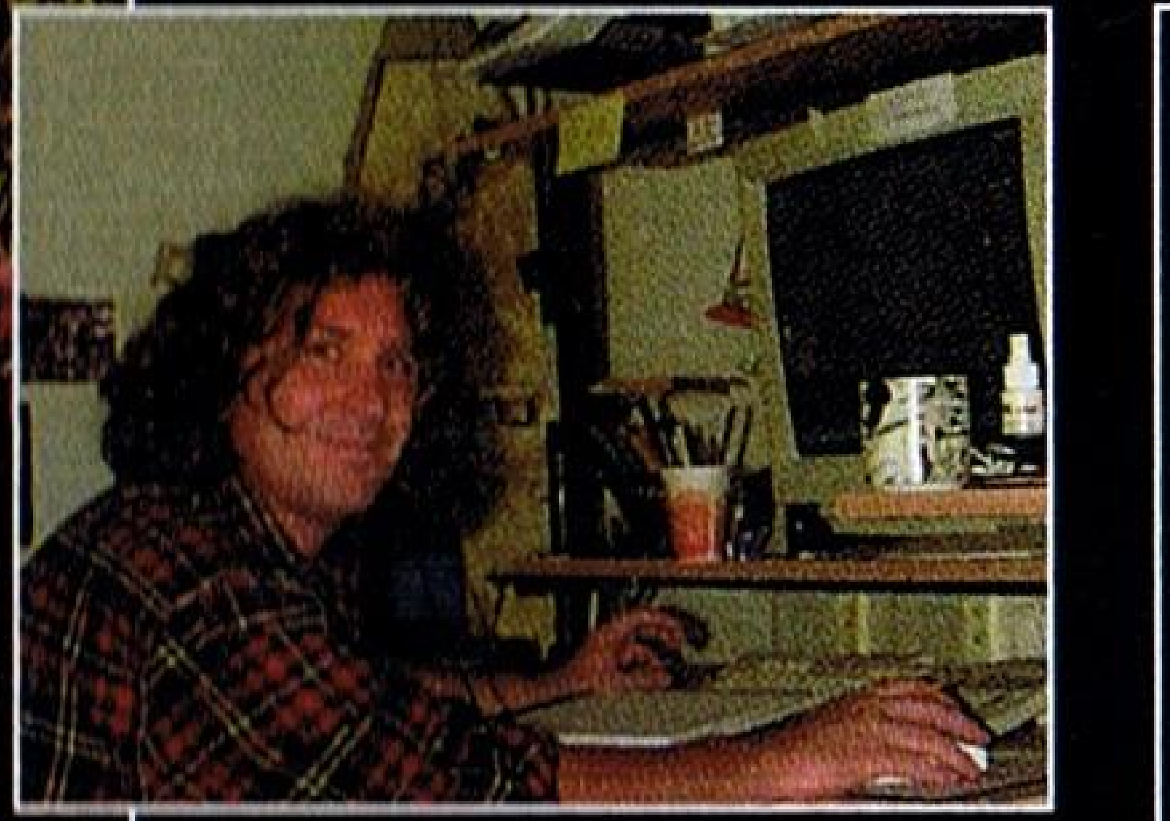
Bob Stevenson (Senior Artist) comes from St. Andrews, Scotland, and does a good job of reminding everyone of this 150 times a day.

Shawn Nelson

Shawn Nelson is Shiny's 3D Artist and motion capture guru. He's from Mill Valley, California, and is a relentless individual. He gets stuff done that others just talk about, no matter how much work it entails.

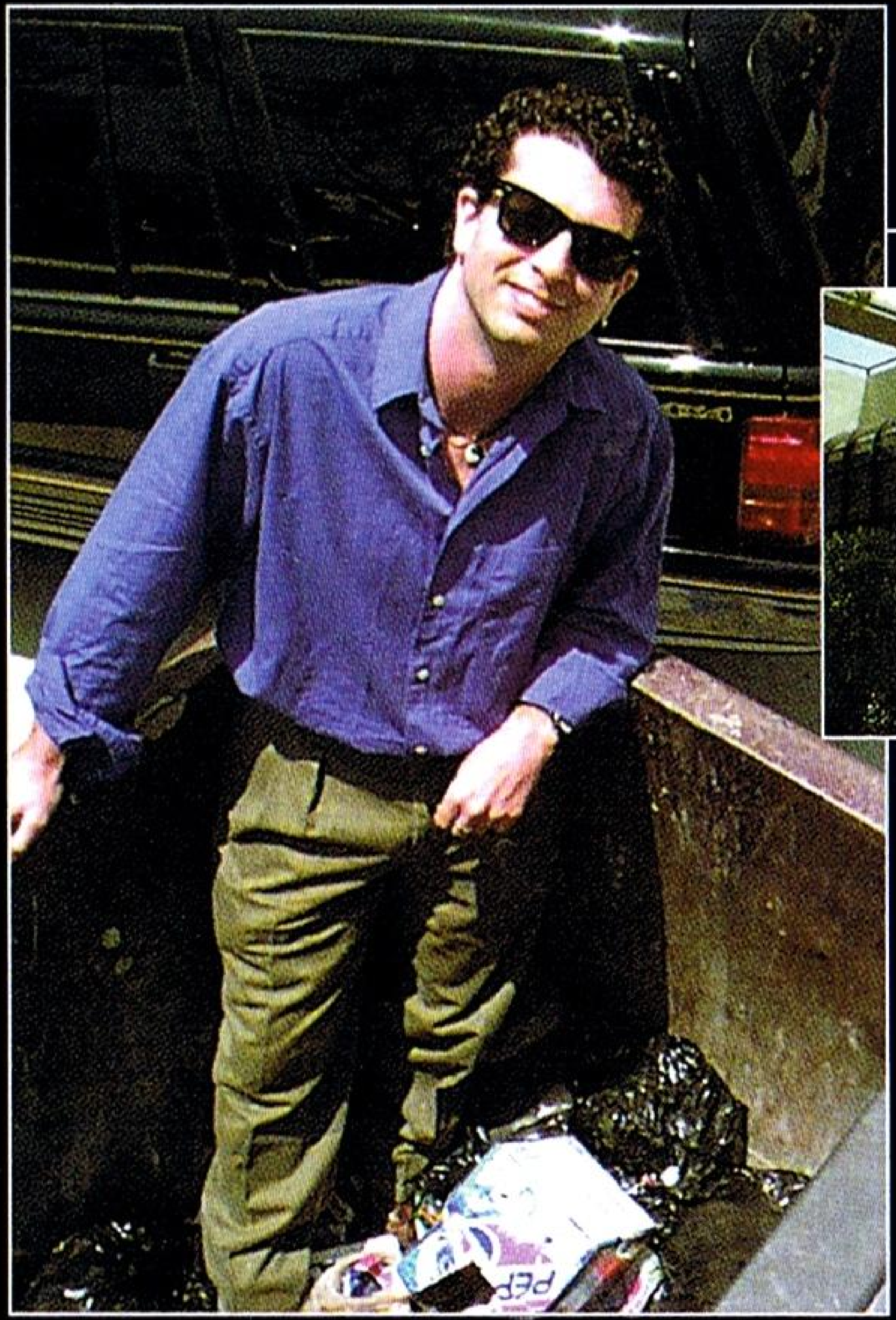


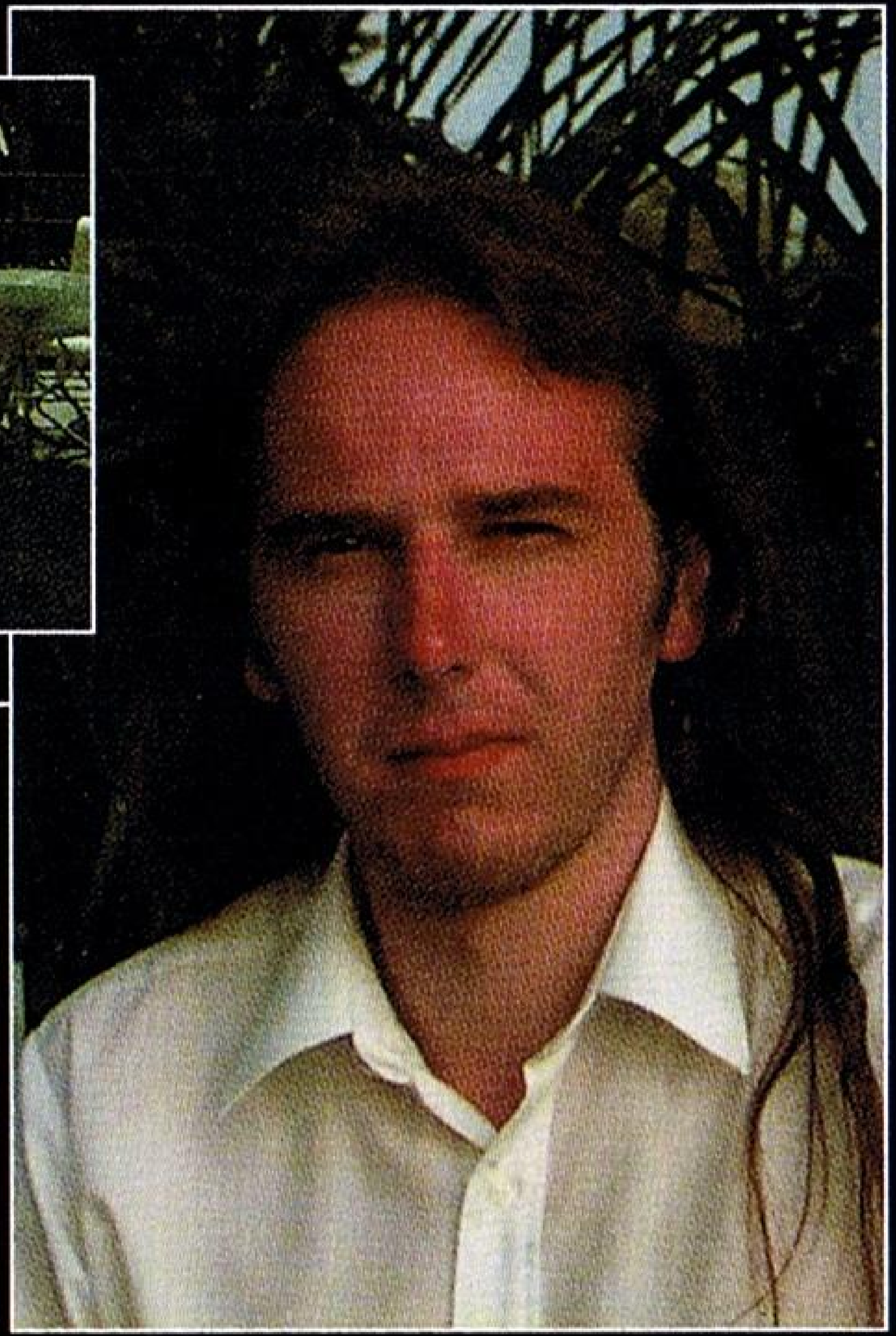




Tim Williams

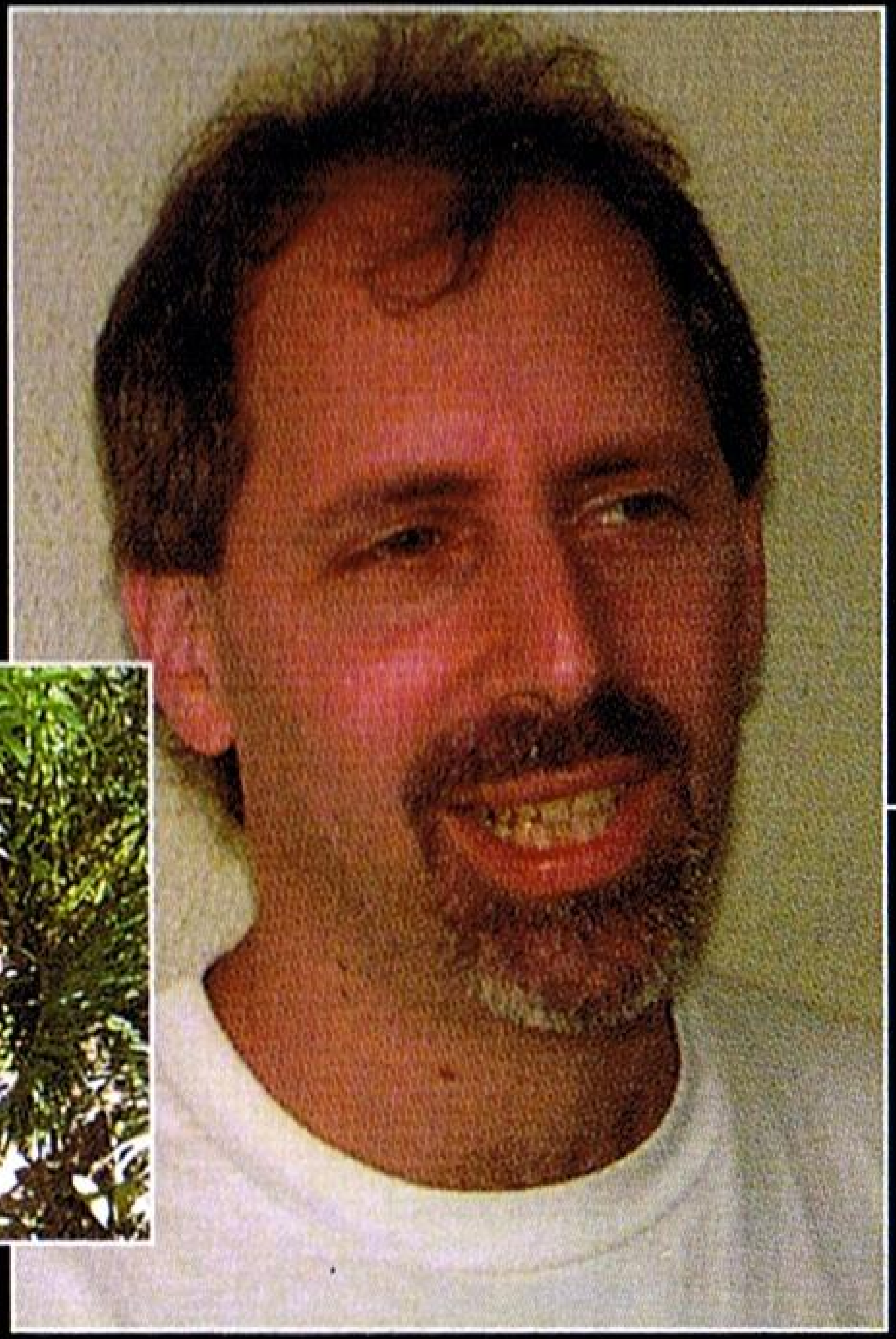
Tim Williams (Lead Designer) is from Linfield, England. Many American women love the English accent and his 'special touch' is to combine it with poetry.





Martin Brownlow

Hailing from Mansfield, England, we have Martin Brownlow (Senior Programmer). Everyone who moves to Laguna is warned to wear suntan oil. They all ignore the warning and they all get burnt! Martin suffered the most, and after a week with Shiny he looked like a red, puffed-up marshmallow. Luckily though, he didn't find the local nudist beach.



Andy Astor

From Scarsdale, New York, Andy Astor (Senior Programmer) is an enthusiastic cook. He has worked with David Perry since the *Cool Spot* days. Andy programs so fast that he uses two keyboards (honest).

DANGER
R22
Beta
VIPER

Dave Perry Interview

David Perry, President of Shiny Entertainment, is 28 years old and stands six foot eight inches tall. Born in Northern Ireland, he now lives in sunny southern California.

David has always loved playing games, but has never been a fan of titles packed with full motion video and long access times between screens. He's also a sucker for action movies such as *Aliens* and *Terminator*. While his favourite bands is U2, he likes to listen to dance music and Clannad while working. Sports-wise, David enjoys skydiving, scuba diving and, more bizarrely, riding a unicycle.

What games have you worked on?

Zillions of embarrassingly crap games over very many years. Ones worth a mention would be *Teenage Mutant Hero Turtles, Aladdin, Cool Spot* and *Earthworm Jim*. Someday I am planning to have kids, so I'm now trying to make better games so that their friends won't hate them at school.

How did you get into the industry?

While at school, I wrote some books on programming video games before they were on sale in UK shops. After a few royalty cheques arrived in the mail, I decided to ditch my plan to be the first juggling dentist.

Actually somebody e-mails me and asks me this same question every day... "How do I become a video game programmer?" I wish he would stop! Nowadays the trick is to buy Visual C++ and a book on how to program games.

Why did you decide to create your own company, Shiny Entertainment, and leave Virgin after Aladdin?

People kept calling me a virgin. To be completely honest, the people at Virgin are very cool and I did really enjoy working with them.

Who comes up with the ideas for your games?

We want to keep it a secret, so please don't tell. We owe it all to Nancy, the wonderful lady that cleans our office. She taught me how to program really fast logic and how to get a refrigerator sparkling clean.

If you were a child, which console would you buy?

I am a child, and I bought them all!

Which famous game would you like to create?

Earthworm Jim (oh yeah... we did that already).

What kind of music do you listen to?

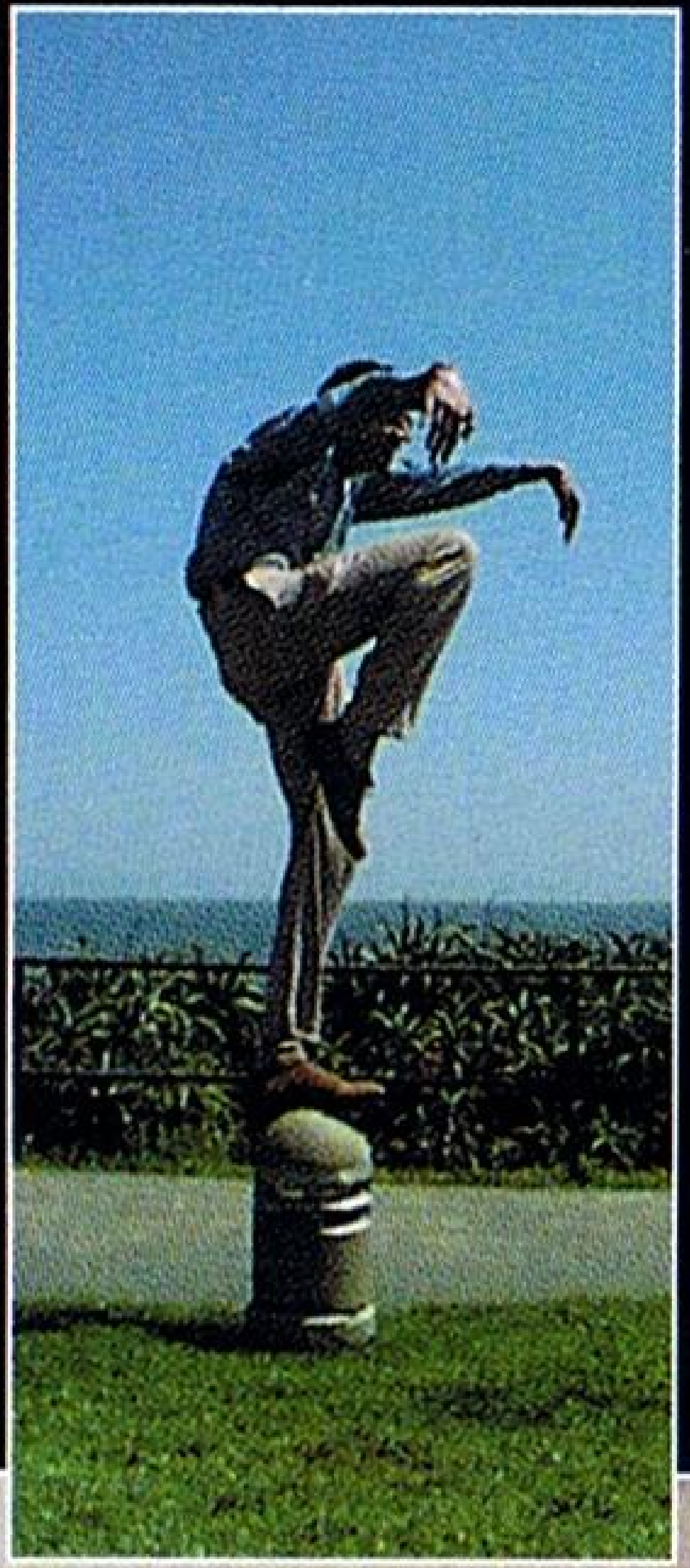
I expect you think (if you have played *Earthworm Jim*) that I love bagpipe or banjo or tango or polka or some twisted weird funky music. No, no, no... We all hate it really, we just wanted to be socially responsible and make kids stop playing video games and do their homework instead.

What are your favourite films?

Anything that stars a British actor with a cockney or Scottish accent. It is really funny to be sat in a cinema in America laughing at the jokes as all the Americans around me are saying "eh, what did he say?".

How long does a game take to make?

We have 12 months to finish – otherwise we had better have a good hiding place somewhere else in the world. We usually take six months worrying about only having 12 months and then six months trying to get the game done.



Do you have any tips about any marathon programming stints you've done?

Just don't kiss anybody afterwards.

What drives you in your work?

The fact that every day kids are giving a damn about our work and then taking time to write us some really cool letters (we personally respond to every one we get). Saturday morning there's always a line of kids banging on my front door wanting to challenge me at their latest game. That is really rewarding... Oh, and watching my dog Savage chase them away also has its rewards.

Describe yourself in ten words...

Tall, tall, tall, tall, tall, tall, tall, tall, and thin.

Any comments on moving to the States?

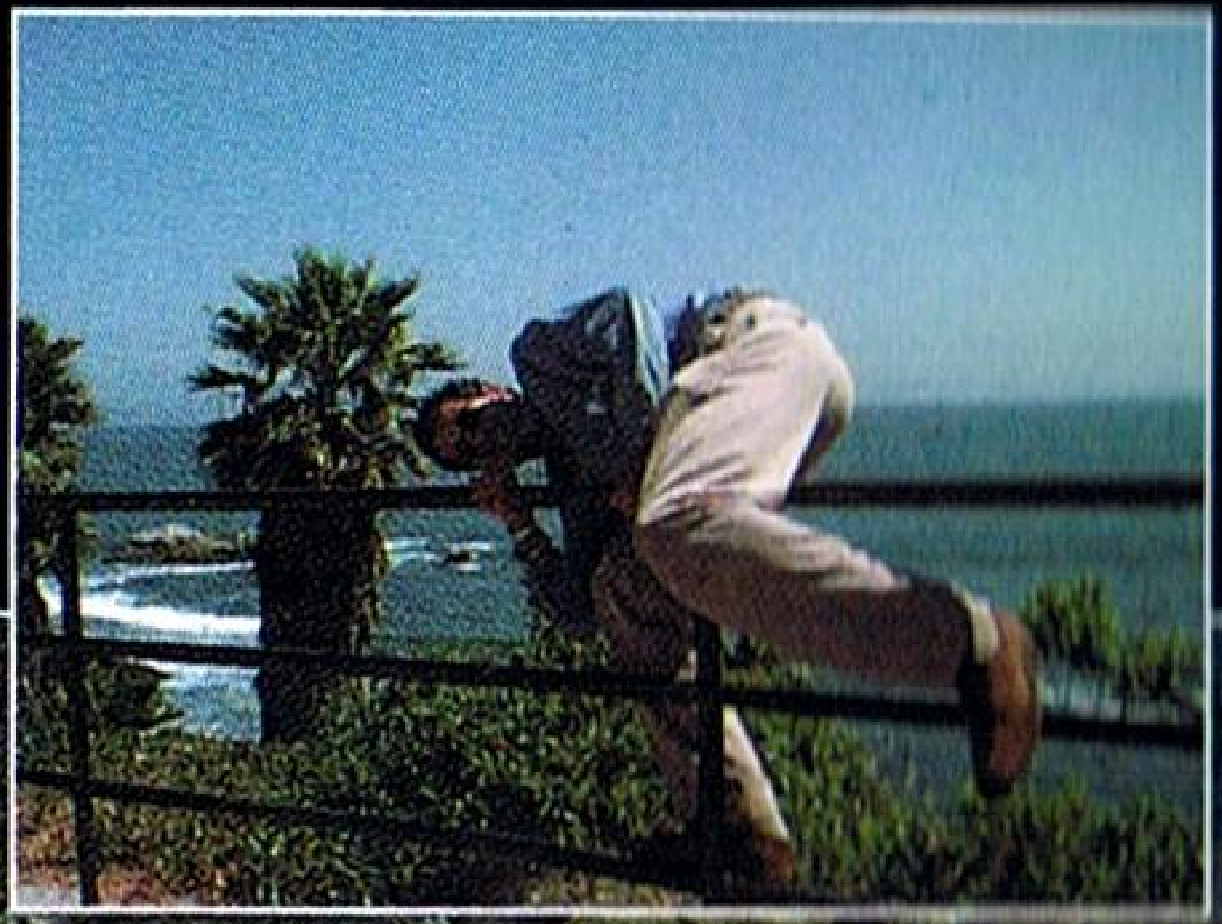
They don't sell Flakes, Ripples and Devon Custard in America. You have to be British to really understand the sheer weight of this.

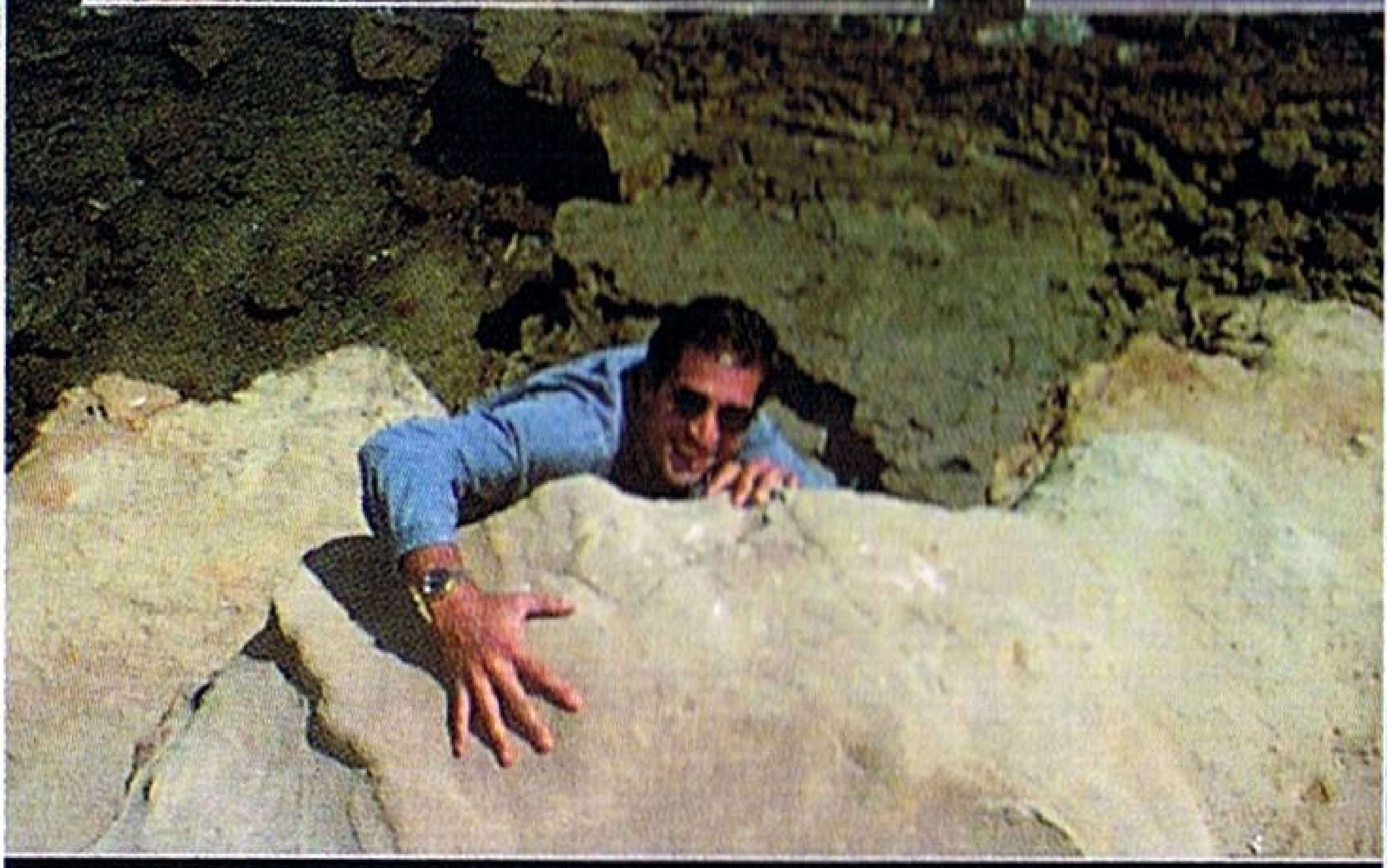
What car do you drive... anything special?

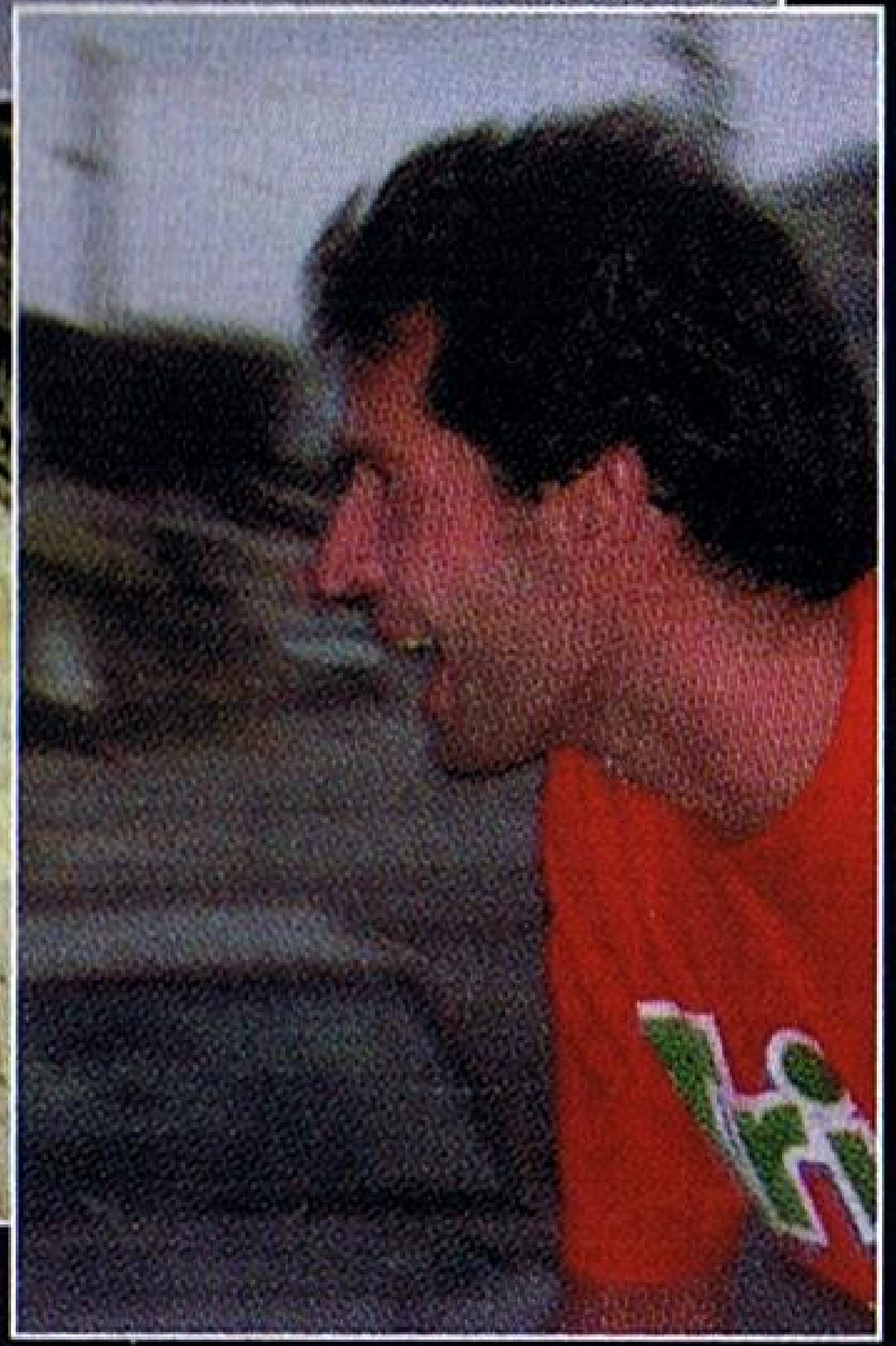
Anything red. I drive anything red and fast. I once had two red cars (Porsche 356B Classic and a Dodge Viper). However, I found that given the choice between looking GQ and experiencing pure adrenaline pumping speed, the speed wins every time.

I recently sent the Viper back to the 'Specialist Viper Technician' (they hate being called 'Grease monkeys' or 'Car repair guys'). He took bits off and sent them off to be race-modified. He added Formula-1 five-point seat belts and secret stuff that makes it faster (so... er... nudge, nudge, wink, wink, don't tell my insurance company, eh?).

Basically, now I have a nice red car which burns runway-length skid-marks into the road.







Where did you grow up?

I was born in a town called Lisburn, and grew up in a tiny town called Donegore, Northern Ireland. (No shops, no bars, no arcades, no cinemas, just a church.) Set way out in the Irish countryside (no we were not potato farmers), my first job was lifting bales of hay into trucks. How I ever got into the field of Intellectual Copyright, Merchandising and Interactive Entertainment is still a mystery to me today.

Where do you live now?

I live in a 6,500 square feet house overlooking the ocean and the best surfing beach in the area. I am totally lazy – it was the only house I could find with an elevator. I have a miniature sausage dog, a wife and 0.0 kids. The house is painted in great detail inside to look like a street; it has a large atrium and about 100 feet of skylight, so basically you feel like you are actually outside when you're inside. Believe me, it's very weird when you're drunk.

Any wacky hobbies?

I like to scare magazine editors by doing *Back To The Future* demos in the Viper. I am also currently learning to fly helicopters. I scared the staff recently when the helicopter I was flying started to break down when I was 1,000 feet in the air. It started to go out of control, and I thought it was because I was just a bad pilot! I was forced to make an emergency landing into a AAA (car club) parking lot. It was all okay though... Luckily, I was a paid up member of that particular car club.

Aside from this I am a qualified scuba instructor and have dived all over the world, sometimes past the legal limits. Maybe after all that Nitrogen Narcosis that's what's wrong with me? I have been attacked by a shark only once, I lost my entire calf muscle and with all the blood in the water a Mako shark was attracted and bit my entire right arm off.... then I woke up. Just thought I would brighten up my lousy scuba story.

I do magic and have hundreds of tricks. I once nearly severed a kid's arm with my guillotine trick, so I tend not to do that particular trick anymore. It gave me a really good idea for a video game though.

I juggle and even used to be on an English unicycle-hockey team in Kingston (honest!). I brought my unicycle to America, but nobody believes me that you can play with ice hockey sticks and a puck on a basketball court.

Are you sporty?

No, sorry, I am a wimp. My favourite sport is The Ultimate Fighting Championship. This is something banned in nearly all the states of America. With so many to choose from though, one state always lets things through. Basically, for three hours straight, people from all over the world beat each other senseless with no rules – the last man standing (or being held up) wins!

Watching this programme reminds me that when I am working at 2.00am, making video games is not that bad a job after all.

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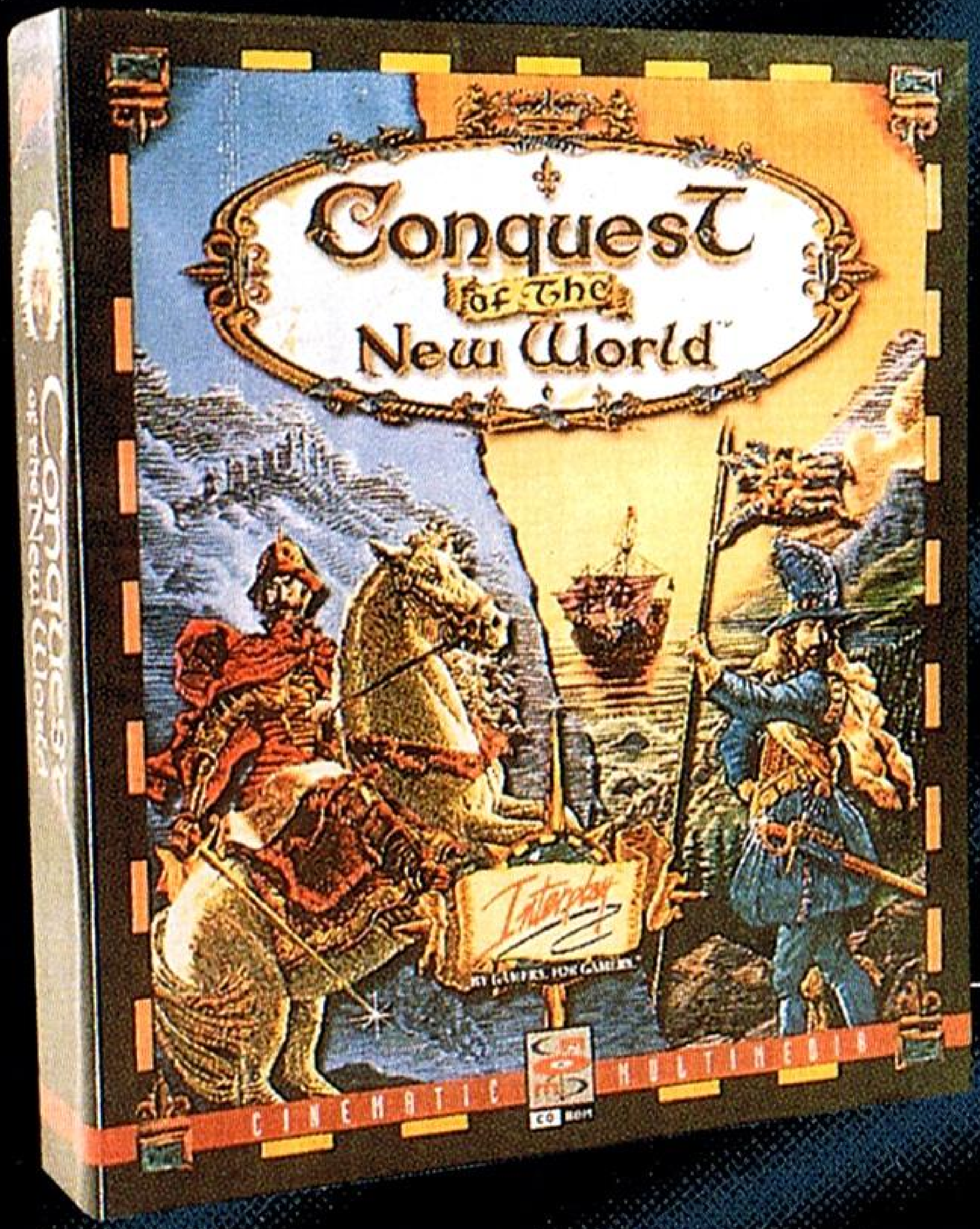
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Blood & Magic

Interplay's first title based on TSR's Advanced Dungeons and Dragons' *Forgotten Realms* series, part of the most popular role-playing system in the world. Battle through remote wilderness, forgotten lands and exotic regions in this top-down, real-time strategy game. Play as good or evil as you control 28 individual characters through five realms and 15 different missions.

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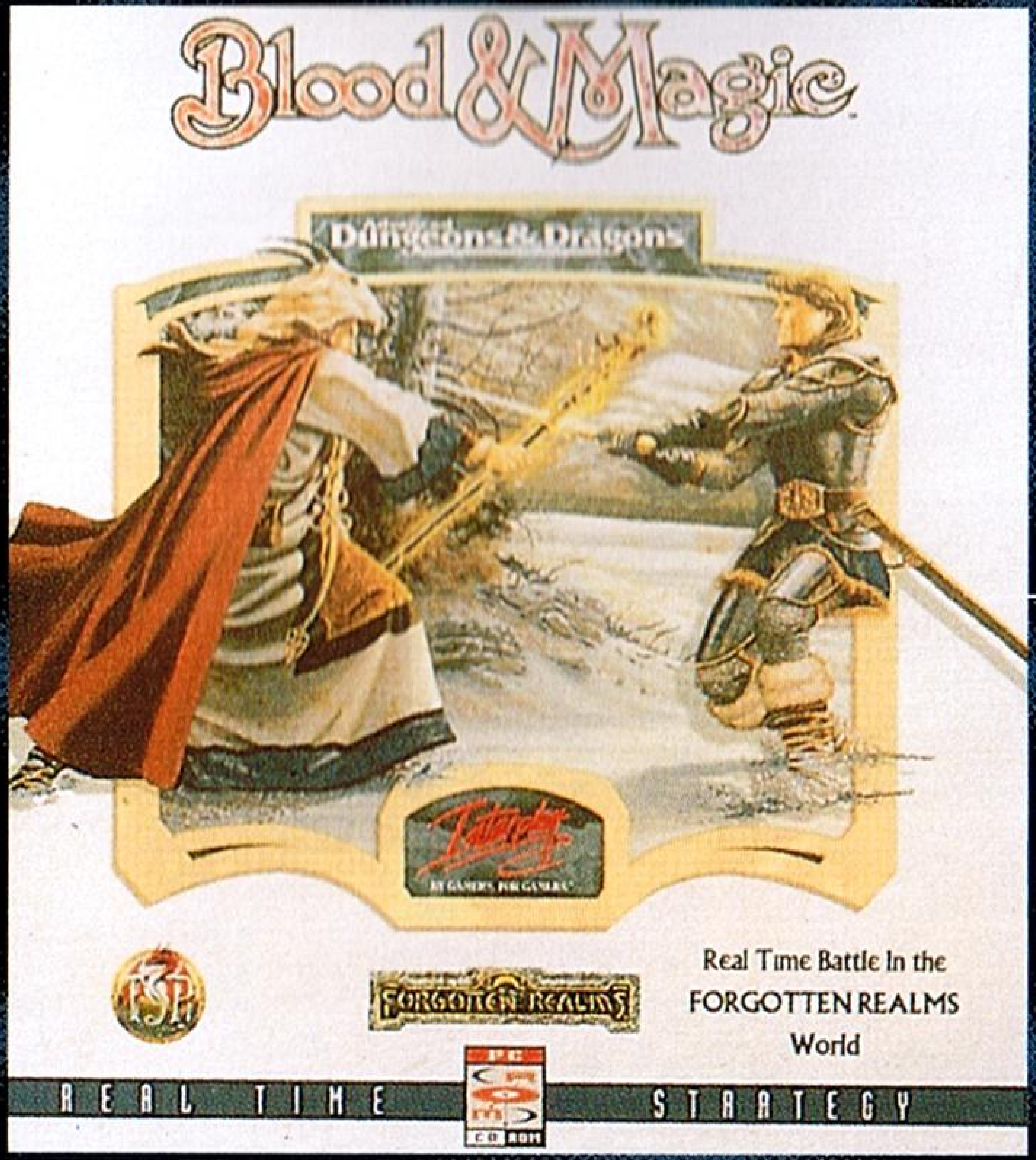
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M.A.X

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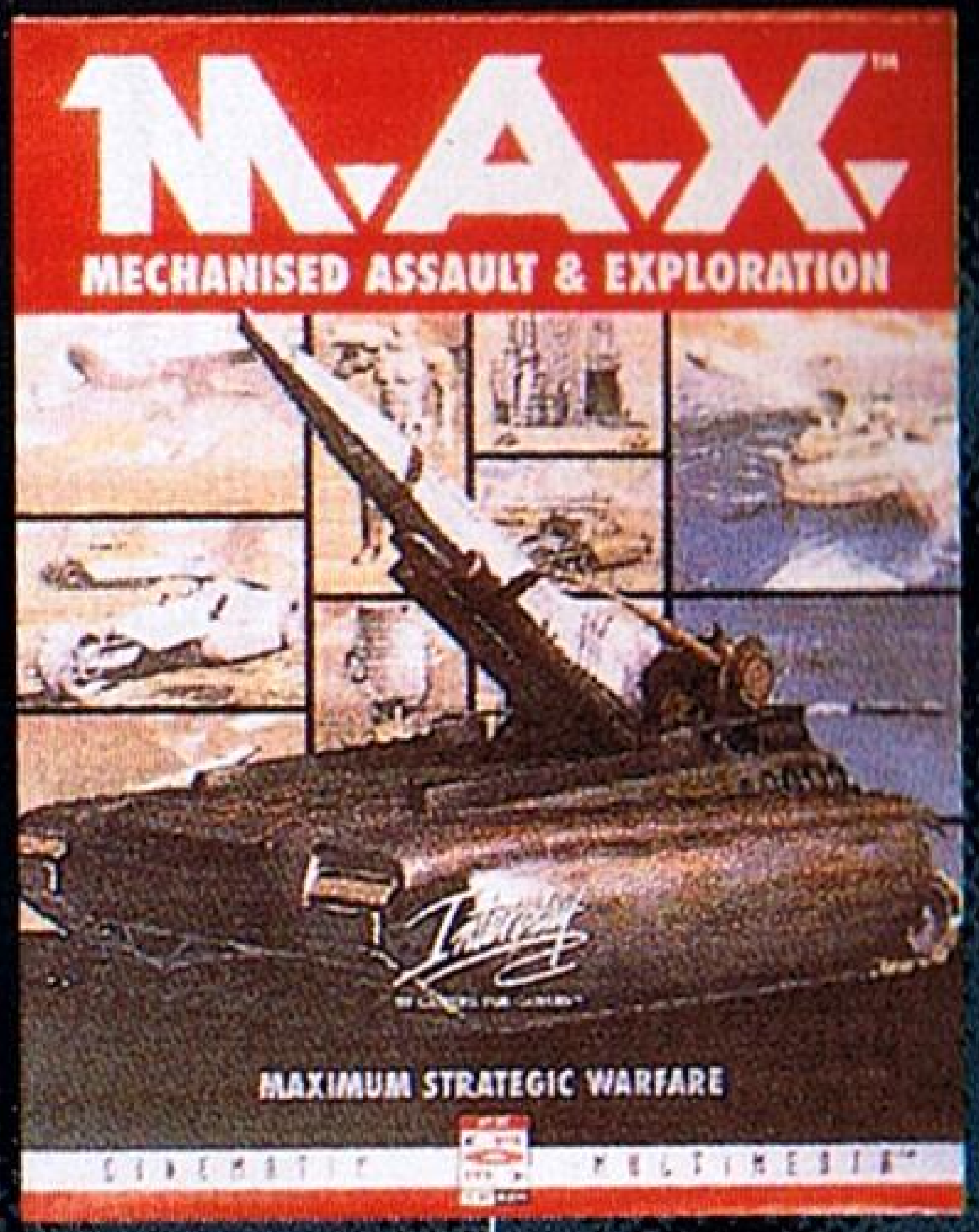

Shattered Steel

The year is 2132 and the human race faces extinction. You are a mercenary contracted to investigate a mysterious communication problem with a nearby planet. Expecting to find a simple pirate raid you are soon launched into an all-out war with hostile mechanised aliens.

Shattered Steel is a fast-paced 3D action game featuring huge mechanised war machines, armed to the teeth with devastating armaments. The game boasts network play for up to 16 players and a developer-written mission editor for easy creation of additional levels.

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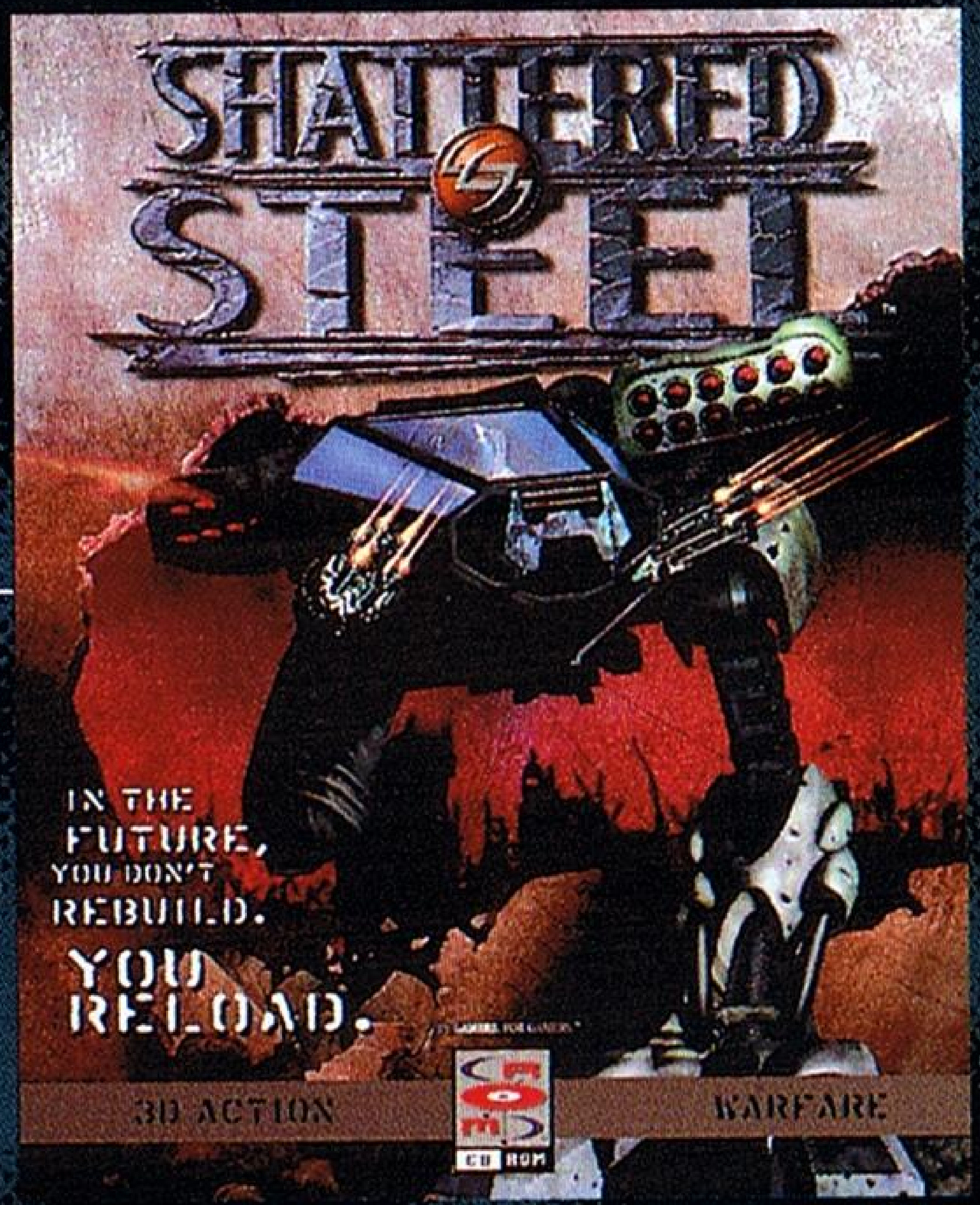

Descent 2

The sequel to one of the finest 3D shoot 'em ups of all time. Featuring 30 brand new levels which transport you to five completely new worlds and 10 brand new weapons, *Descent 2* is the definitive 360 degree 3D action game. Enjoy complete freedom of movement... but be careful – it may give you motion sickness.

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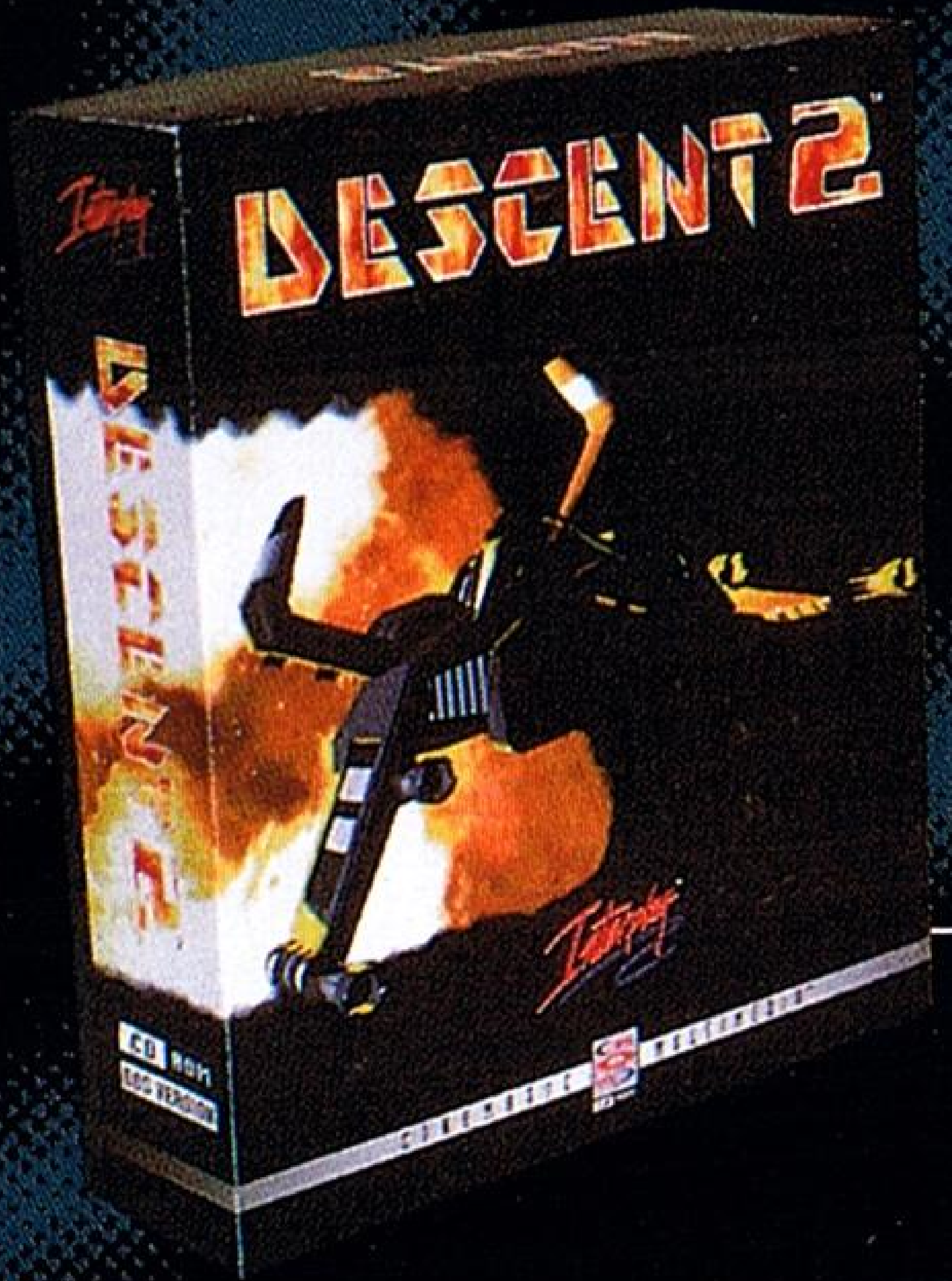

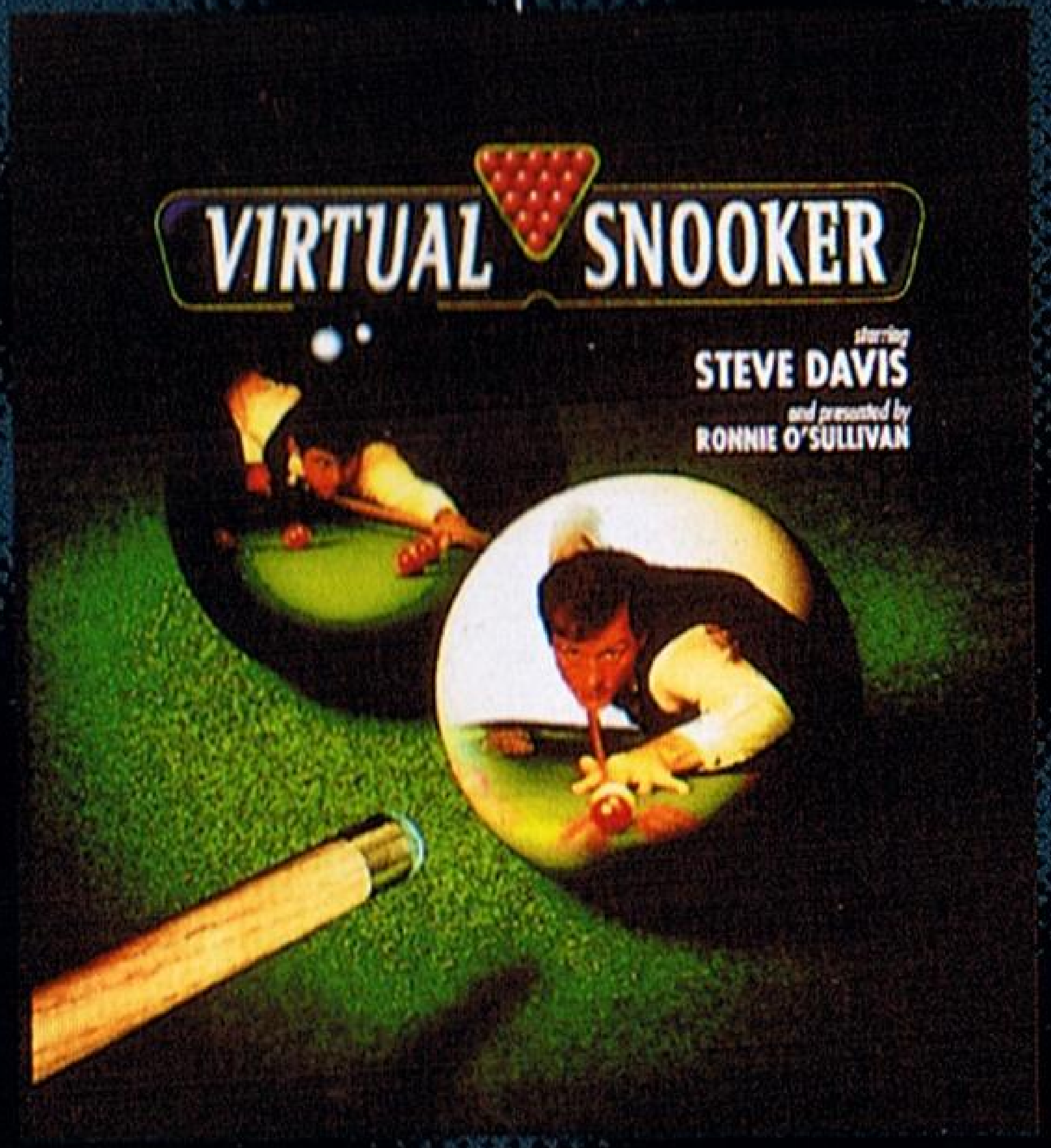

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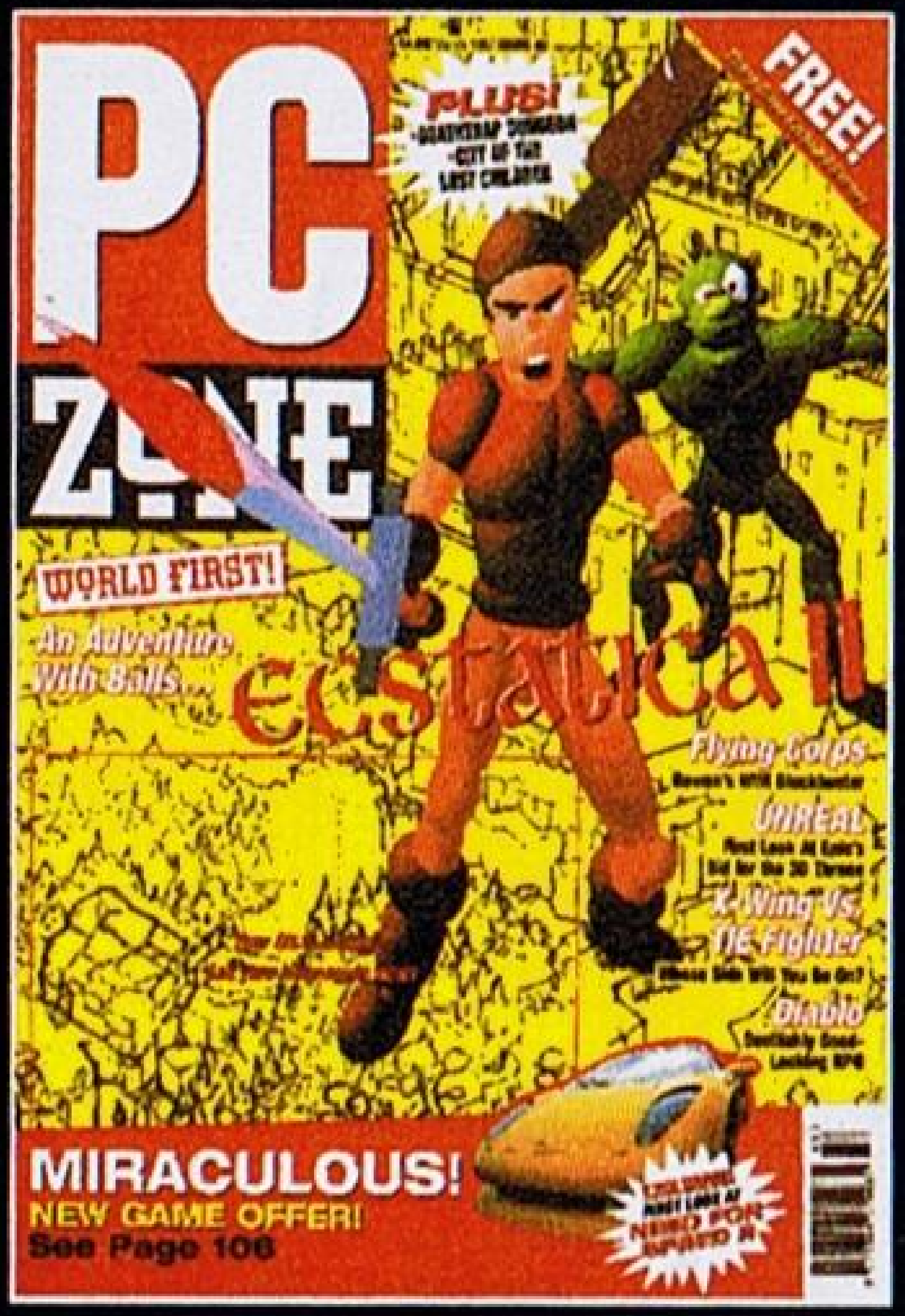

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